

AUTUMN HALL®

The Official Journal of the Foundation For Amateur Radio, Inc.

DECEMBER 1999



Rules and Regs • ARRL Report • VE Exams Schedule
Public Service Report • DX Column • Regional Hamfests
Club Reports • Shack Sales • Much More!



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Regional Hamfests and Other Events

Dec. 3	Army/Navy Special Event Station, Annapolis, MD (see page 8)	
Dec. 3-5	ARRL 160 Meter DX Contest (see DX DX DX page 14)	
Dec. 8	Foundation for Amateur Radio monthly meeting, Takoma Park, MD	
Dec. 11-12	ARRL 10 Meter DX Contest (see DX DX DX page 14)	
Dec. 18	OK/OM DX RTTY Contest (see DX DX DX page 14)	
Dec. 18-19	Stew Perry Contest (see DX DX DX page 14)	
Dec. 18-19	Croatian CW Contest (see DX DX DX page 14)	
Dec. 19	RAC Canada Winter Contest (see DX DX DX page 14)	
Jan. 16	Richmond Frostfest 2000, Richmond, VA	(804) 739-2269
Jan. 19	BARC "It's Free" Mini-Fest, Timonium, MD	(410) HAM-FEST
Jan. 30	Maryland Mobileers ARC Hamfest, Odenton, MD	(410) 766-2199
Feb. 27	Winterfest, Vienna Wireless Society, Annandale, VA	(703) 757-7021
Mar. 25-26	Baltimore Hamboree and Computerfest, Timonium, MD	(410) HAM-FEST

NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. **Visitors are always welcome!** The next meeting will be held on December 8th in Takoma Park, Maryland at Columbia Union College, HMS Richards Bldg., Flower Avenue (Take beltway exit 30, South on Colesville Road to Franklin Avenue, left on Franklin to Flower, right on Flower to Carroll Ave., left on Carroll to Greenwood Ave., left on Greenwood to 2nd building on left.

**Talk-in on
146.55**



On The Cover

Pictured on the cover of *Auto Call* this month is Windy Joy Silverman, KC4ZQW, from her home QTH in Spring Hill, FL. Windy was one of sixty-seven Foundation for Amateur Radio 1999 Scholarship winners featured in last month's issue of *Auto Call*. Windy holds a General Class license and enjoys operating on both HF and VHF bands.



American Radio Relay League Report

By John Swafford,
W4HU

The purpose of The ARRL Letter is to provide essential news of interest to active amateurs promptly and efficiently, and in advance of publication in our official journal QST. The ARRL Letter strives to be fast, accurate, concise, and readable. Material from The ARRL Letter may be reproduced in whole or in part in any form, including photo reproduction and electronic databases.—Credit must be given to The ARRL Letter and The American Radio Relay League.

PHASE 3D GETTING FINAL INSPECTION

Phase 3D Project Leader Karl Meinzer, DJ4ZC, and a delegation from AMSAT-DL are at the Phase 3D Integration Laboratory in Orlando this week, giving the satellite a final once-over. "So far, everything is proceeding smoothly," said AMSAT-NA President Keith Baker, KB1SF. He said the German team is putting P3D through its paces as a final checkout prior to shipping the satellite to the launch site at Kourou in French Guiana at month's end.

A contract accepting Phase 3D as a payload for the "first suitable" Arianespace Ariane 5 vehicle launch was signed October 5. Meinzer said a launch opportunity could come during the first half of next year. The AMSAT-DL Web site alludes to what it called an "appropriate" launch opportunity next April for the Ariane 506 flight. But Baker and AMSAT-DL caution that market conditions play a role in governing the manifest for Ariane flights. "Things are very fluid right now as regards

launch manifests with Ariane," Baker said, adding that launch and payload schedules can change "in a big hurry."

Arianespace says that Phase 3D, which weighs 1430 pounds, will be injected into a geostationary transfer orbit. The satellite then will use its own propulsion system to reach an elliptical orbit ranging from approximately 2480 miles to more than 27,000 miles from Earth.

Once in its intended orbit, Phase 3D will have an estimated life span of 10 years. For more information on Phase 3D, visit the AMSAT-NA Web site, <http://www.amsat.org>.

ISS FLIGHTS RESET

NASA now says the space shuttle Atlantis flight—mission STS-101—that will carry the initial Amateur Radio gear into space for the international Space Station will launch no earlier than February 10, 2000.

The flight transporting the VHF and UHF handheld transceivers and associated antennas and accessories to the ISS had been scheduled to launch in December. NASA imposed a shuttle launch hiatus to perform electrical inspections of the entire shuttle fleet, however, disrupting the launch schedule. The inspections came in the wake of problems during the July launch of the shuttle Columbia, when astronauts and ground controllers struggled with power failures in computers controlling two of the orbiter's three main engines.

"Our number one priority for the space shuttle is to fly safely, and that is why we delayed our launch preparations and have performed comprehensive wiring inspections and repairs," Space Shuttle Program Manager Ron Dittmore said.

NASA and Russian space agency officials also have agreed to delay the launch of the Zvezda service module that will house the amateur gear.

Continued next page

According to NASA, a US delegation and the Russians agreed that "it is no longer prudent to proceed with the current service module schedule." The new projected launch window is between December 26 and January 16.

In August, key antenna hardware for the Amateur Radio on the International Space Station project headed for NASA's Goddard Space Flight Center to undergo integration and flight qualification testing. The initial ham gear will support amateur operation from the ISS on voice and AFSK packet on 2 meters and 70 cm.

For more information on ARISS, visit <http://garc.gsfc.nasa.gov/~ariss/ariss.html>.

AMATEUR RADIO SHOWS SLOW GROWTH

According to Amateur Radio census statistics cited in the October 15, 1999, W5YI Report, US licensee growth has nearly stalled overall during the past year. The W5YI numbers—which exclude hams whose licenses have expired but remain within the two-year grace period—show 675,739 US licensees as of September 30, 1999. While that's up by more than 3000 hams over the same month in 1998, the number represents less than one-half percent growth.

The number of US amateurs peaked over the past year at 676,318 at the end of July. Looking at the numbers by license class, only Technician showed substantial growth—up by more than 10,500 from a year earlier. Tech Plus and Amateur Extra classes rose slightly too, but the numbers were down slightly for Advanced and General, and the number of Novice licensees declined by more than 5100 over the past year.

HURRICANE WATCH NET GETS SURPRISE CHECK-IN

The Hurricane Watch Net got a surprise check-in October 20 as it activated on 14.325 MHz to track the course of Hurricane Jose.

"Riley Hollingsworth checked in to tell us that they were monitoring and would handle any interference problems," said Hurricane Watch Net Manager Jerry Herman, N3BDW. "Needless to say, the little bit of interference we were getting almost immediately ceased. His call sign and his presence on frequency had a positive effect."

Hollingsworth—who's K4ZDH—was equally impressed. "Those guys did a wonderful job," he said. "I was very impressed and very proud!"

While Jose was still a hurricane, the Hurricane Watch Net had been taking reports from stations in the track of the storm, and transmitting advisories. Hurricane Watch Net participants file real-time storm and weather data, which is relayed to forecasters via W4EHW at the National Hurricane Center in Miami. Herman said things got up close and personal for one of the W4EHW operators during Hurricane Irene earlier this month. "Julio Ripoll, WD4JNS, reported that flooding in the Miami area was the worst he had seen in 17 years," he said. Julio had to drive through water two feet deep to get to and from the National Hurricane Center in order to operate W4EHW." At one point, Herman said, Ripoll—the assistant W4EHW coordinator—waded through knee-deep water to assist a stranded motorist.

Herman says the Hurricane Watch Net has had a very good season so far. "Probably the majority of our reports are measured data, and that's something the guys at the Hurricane Center really appreciate," he said. Herman speculated that more hams now own home weather stations that allow them to provide precise weather data at their location to the Net.

Overall Net participation this hurricane season has been excellent too, Herman said. "I'm real pleased with the way it's been going, and the people in Miami seem to be using the data—they keep asking us for more—and we'll keep trying to get more for them."

Continued next page

The current hurricane season runs through November.

RADIO LEGEND JEAN SHEPHERD, K2ORS, SK

Jean Shepherd, K2ORS—the man once described by media critic Marshall McLuhan as “the first radio novelist” and by others as “Mark Twain for the radio”—died October 16 in a hospital near his home in Sanibel Island, Florida. He was 78.

One of the original radio “talkers,” Shepherd gained a loyal following of overnight listeners during his more than two-decade tenure at powerful WOR in New York during the 1950s, 60s and early 70s. Shepherd was first licensed as W9QWN in 1938. He served in the Army Signal Corps during World War II, then attended Indiana University before doing radio in Cincinnati and Philadelphia and finally New York.

On the air, “Shep” worked without a script or reliance on telephone callers spinning yarns—typically with a sardonic edge—often based on his boyhood years in Hammond, Indiana and his time in the Army and occasionally mentioning ham radio. Among the characters he created was alter ego Ralphie Parker, who appeared in his 1983 film classic “A Christmas Story,” which he wrote and narrated.

The banquet speaker at the 1985 Dayton Hamvention, Shepherd also provided the introductory narration to the Morse code instruction tape included with the League’s Tune in the World license manual. Several hams wrote ARRL Headquarters to say that Shepherd had provided inspiration for their early interest in Amateur Radio.

In later life, Shepherd remained active on HF SSB and occasionally on 2-meter FM, sometimes operating from his boat in Florida. He also had an interest in classic automobiles. His third wife, Leigh, died last year.

HUMANITARIAN AWARD NOMINATIONS CLOSE DECEMBER 31

Nominations close December 31, 1999, for the 1999 ARRL International Humanitarian Award. The award is dedicated to those amateurs who, through Amateur Radio, are devoted to promoting the welfare of mankind. The prize goes each year to truly outstanding Amateur Radio operators in areas of international humanitarianism and the furtherance of peace.

Any radio amateur or group of amateurs worldwide who has provided extraordinary service through their Amateur Radio skills for the benefit of others in times of crisis or disaster is qualified to receive the award.

The award recipient is selected by a committee appointed by the League’s President. The committee will accept nominations from a licensed radio amateur, governmental or any other organization that has received the benefits of the radio amateur’s extraordinary service. Nominations must include a summary of the nominee’s actions that qualify the recipient for the award and statements from at least two references—including names and addresses—for verification.

All nominations and supporting materials for the 1999 award must be submitted in writing in English to ARRL International Humanitarian Award, 225 Main St, Newington, CT 06111 USA. Nominations must be received by December 31, 1999. In the event that no nominations are received, the committee itself may determine possible recipients or decide to make no award.

The 1998 award went to the Radio Amateur du Quebec Inc, for its efforts during a devastating ice storm. For details, see June 1998 QST, page 58.—Rick Palm, K1CE

IN BRIEF.

* Outgoing ARRL QSL Service status: The ARRL Outgoing QSL Service reports that as of

October 8, 1999, it has handled 1,445,385 cards this year. This includes cards going to US incoming QSL bureaus and cards sorted by contractor. The Outgoing QSL Service welcomes new QSL Service Assistant Tammy Krauss, KB1CYN, who joined the ARRL HQ staff on October 11.

* Solar maximum prediction: Solar physicist David Hathaway at the Marshall Space Flight Center says he expects the current solar cycle to peak by mid-2000. "The projected peak is comparable to, but lower than the peaks of the last two maxima—1989 and 1978," Hathaway says. One thing is for sure: As the geomagnetic activity increases so do the chances of more geomagnetic storms. While there will be more disturbances, those in the mid-latitudes will have the unique opportunity to see some spectacular sights that are normally visible during these times only in the

higher latitudes.—NASA via The Daily DX/Bernie McClenny, W3UR

* Center to study alleged cell phone dangers: The Center for the Study of Wireless Electromagnetic Compatibility at the University of Oklahoma plans to scientifically investigate whether cell phone use at gasoline stations and aboard airliners poses any dangers. Some gasoline retailers have banned cellular telephone use despite a lack of confirmed reports that cell phone use has caused fires or explosions. Center Director Hank Grant also says the aircraft study will include tests with current and future navigational systems. "By providing information based on fact, we will address these issues in a way that benefits everyone," Grant said. For more information on the Center, visit [hht://www.ou.edu/engineering/emc](http://www.ou.edu/engineering/emc).

Special Event Station

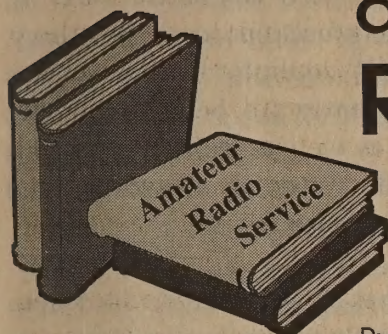
A special event station for the 100th anniversary of the Army/Navy game will be held on December 3, 1999. The Call is N5A and we will be operating from the Naval academy. There will be a certificate issued to all people who send a self addressed stamped envelope. The station will come on the air at 1200, December 3rd (beginning of the ball run) and run till 1800 or the end of the game which ever comes first. The following Frequencies are the planned for operations unless bands are problems.

14.250 and 7.240
28.450 and 21.350

+/- QRM. If you require any more info please let me know. Thanks for your help in getting this info out to our fellow amateurs.

Mike Waranis
422 Halsey RD
Annapolis MD 21401
honor@annapolis.net
410-295-7256

Rules and Regs



By Jack Kelleher
W4ZC

VANITY WAITING GAME CONTINUES

(Tnx ARRL Ltr v18 #43. This item is reproduced in its entirety; the ULS program is apparently here to stay, so this information is "durable")

The long queue of vanity call sign applications got just a little bit shorter during the month of October, but vanity processing continues at near-glacial velocity. Since the Universal Licensing System was deployed for the Amateur Service on August 16, 1999, the FCC reports it has processed 10,878 amateur applications. Of that number, just over 1000 were requests for vanity call signs. To date, there have been 494 vanity grants and 525 dismissals.

The FCC didn't resume vanity processing at all until mid-September, and then only in comparatively small test batches. Things have speeded up considerably since then—approximately 150 vanity grants were issued in the past 10 days—but there's still a lot of catching up to do.

So far, the FCC has only processed vanity applications received through August 17, and as of October 28, it had not completely checked the processing run of the previous evening. All vanity applications received after July 22 will be processed via the ULS.

"We regret that this process has been a slow one," the ULS Task Force is telling applicants who inquire. "However, the Commission feels that the integrity of the vanity call sign process is a major concern and requires extensive data control during the implementation of call sign assignment in the new ULS environment." The FCC says it will continue processing in a "verification mode," and will resume routine vanity processing once it has "ensured the integrity of the vanity program."

The ULS Task Force has offered some tips to those submitting vanity call sign requests via the ULS. Vanity applicants only must complete Schedule D for Form 605. When requesting a vanity call sign, applicants should answer "no" to Item 1 ("Is this a request to change a station call sign systematically?"). The Task Force concedes this might seem confusing or contradictory, but says the question only relates to a request for a "systematic" or "sequential" call sign and has nothing to do with vanity.

Item 2, Application Purpose, on Form 605 is another point of confusion. The FCC says vanity applications should indicate "MD" ("Modification") for this item. "This is not very clear in the instructions," a Task Force spokesperson allowed. Those filing to change name, address, telephone number, fax number, or e-mail address should indicate "AU" ("Administrative Update") in Item 2, the Task Force said. The main exception would be someone changing their address and also requesting a systematic, or sequential, call sign change—such as someone moving from one call district to another. In that case, the Task Force says, the applicant should indicate "MD" (for "Modification"), then check "yes" for Item 1 on Schedule D.

A ULS spokesperson remained optimistic that vanity processing would "move along faster in the next couple of weeks."

Continued next page

NEW ENFORCEMENT AND CONSUMER INFORMATION BUREAUS OFFICIAL

(This item, from ARRL Letter v18, #43, is also reproduced in its entirety to minimize any misinterpretation of the intent and scope of this milestone action by the FCC)

FCC will create two new bureaus—the Enforcement Bureau and the Consumer Information Bureau—effective November 8. FCC Chairman William Kennard made the announcement during testimony October 26 before the House Telecommunications Subcommittee on the FCC's Five-Year Strategic Plan.

“Our decision to establish bureaus devoted exclusively to enforcement and consumer information signals the enormous importance of these functions in our transition from an industry regulator to a market facilitator,” Kennard said. “This reorganization is the first step in a larger effort to streamline and modernize the FCC.”

As expected, FCC Deputy General Counsel David H. Solomon was named to head the Enforcement Bureau. The new bureau will consolidate enforcement functions—including amateur—and personnel from the Commission's existing Common Carrier, Mass Media, Wireless Telecommunications and Compliance and Information Bureaus. Solomon has been Deputy General Counsel since 1994.

Current FCC Legal Adviser for Enforcement Riley Hollingsworth, K4ZDH, says he hopes the reorganization eventually will permit him to increase the amount of time he's able to devote to Amateur Radio enforcement. Hollingsworth will get a new title as part of the reorganization: Special Counsel for Amateur Radio Enforcement.

In a surprise move, Kennard announced his intention to name Lorraine C. Miller to be Bureau Chief of the new Consumer Information Bureau. Miller now directs the Office of Congressional Relations at the Federal Trade Commission. Current Compliance and Information Bureau Chief

Richard Lee had been expected to become the new CIB chief. Instead, Lee has been appointed Senior Director of Licensing Analysis in the Chairman's office. In that role, he'll advise the FCC on consolidating licensing functions across the agency. The new CIB will consolidate the FCC's Gettysburg Call Center (to be renamed the Consumer Center) as well as staff from various bureaus who handle consumer complaints and public information requests.

Hollingsworth has agreed to be detailed from the new Enforcement Bureau to the new Consumer Information Bureau to handle the Consumer Center at Gettysburg after the new bureaus become effective November 8. The temporary duty will last four to six weeks. Hollingsworth says Amateur Radio enforcement will be his priority, and, by agreement between the two bureaus, amateur enforcement will continue at its present pace. Hollingsworth's current duties also include Land Mobile Service enforcement.

For more details on the reorganization plan, visit http://www.fcc.gov/Bureaus/Miscellaneous/News_Releases/1999/nrmc9072.html —FCC news release

FCC REVISES CONDUCTED EMISSION LIMITS

(Tnx ARRL Letter v18 #43)

The FCC has gone along with recommendations from the ARRL and others to hold the line on conducted emissions below 30 MHz from unlicensed consumer electronic and industrial, scientific and medical devices operating under Parts 15 and 18 of the Commission's rules. The FCC has proposed new emission guidelines that are just slightly more stringent than the current FCC standards.

“We conclude that mandatory conducted emission limits continue to be necessary to control interference to communications services,” the FCC

Continued on page 12

said in a Notice of Proposed Rule Making in ET Docket 98-80, released October 18. The Commission announced plans to “harmonize” its conducted emission standards with international standards developed by the International Electrotechnical Commission, International Special Committee on Radio Interference—known as CISPR.

The Commission said it was not persuaded by a National Association of Broadcasters’ suggestion to impose much tighter standards—22 dB greater than present—to protect AM broadcasting.

Comments on the NPRM are due 75 days after its publication in The Federal Register, and reply comments are due 30 days later. A copy of the FCC’s Notice of Proposed Rule Making in ET Docket 98-80 is available at <http://www.arrl.org/announce/regulatory/et98-80/nprm.html>.

FCC ALLOCATES 75 MHz AT 5.9 GHz FOR ITS

As expected, the FCC has allocated 75 MHz of spectrum in the vicinity of 5.9 GHz for use by so-called “Intelligent Transportation System” services aimed at improving highway safety. The co-primary allocation for Dedicated Short Range Communications systems at 5.850 to 5.925 GHz includes the upper portion of a secondary Amateur Service allocation. Hams share 5.650 to 5.925 GHz with government radars and nongovernment fixed satellite service uplinks. The FCC already has allocated 5.725-5.825 GHz for U-NII devices to provide short-range, high-speed wireless digital communication under Part 15.

In releasing its Report and Order in ET Docket 98-95 October 22, the FCC said the 5.850-5.925 GHz band would be devoted to a variety of Part 90 DSRC uses such as traffic light control, traffic monitoring, travelers’ alerts, automatic toll collection and traffic congestion detection. Other proposed uses of ITS would include electronic inspection of moving trucks and emergency vehicle traffic signal preemption. The Commission said

that amateur organizations and licensees “raised the majority of DSRC spectrum sharing concerns” in their comments on last year’s Notice of Proposed Rulemaking on the issue.

In the R&O, the FCC said it was “sympathetic” with the League’s concerns that the ITS and U-NII allocations could impact amateur use in the band but said hams have 275 MHz in the band and most ham use is for point-to-point networks. Given amateur radio’s inherent frequency agility, the FCC said it believes “spectrum sharing between the amateur service point-to-point links and DSRC operations is viable.” DSRC operations in the 5.850-5.925 GHz band “are unlikely to receive significant interference from or cause interference to amateur operations,” the FCC said.

The FCC encouraged ITS entities to “informally notify the ARRL or the local amateur service community” of their intended operation. The FCC has proposed a maximum of 30 W EIRP for DSRC systems, but the rules will require ITS licensees to use the minimal power necessary.

HOLLINGSWORTH REITERATES PLEDGE *(Tnx ARRL Letter v18, #43)*

During the Southwestern Division Convention October 1-3, FCC Legal Adviser for Enforcement Riley Hollingsworth reiterated a pledge to undertake two amateur enforcement initiatives in the coming months: encroachment of unlicensed activity on 10 meters and improper or illegal marketing of HF amplifiers—especially those capable of 11-meter operation. He said that problems on VHF no longer would take a back seat to HF enforcement. He also advised attendees to adhere to the basis and purpose stated in Section 97.1 of the FCC rules. In response to a question during a convention forum, Hollingsworth clarified that jamming a station thought to be breaking the FCC rules on a repeater is never justifiable and always illegal. “We have never suggested—let alone authorized—jamming as a way to keep certain people off,” he said.

Continued next page

FCC TACKLES BORDER DISPUTE

(Tnx ARRL Letter v18, #42)

FCC Legal Adviser for Enforcement Riley Hollingsworth has made good on a promise to look into complaints of apparent US malicious interference to a repeater in Mexico operating on 145.460 MHz.

"We've been getting some vigorous complaints for a little while now about the repeater system KC6OKA/K6PYP," Hollingsworth said this week. US hams also approached him about it during the recent Southwestern Division Convention in Long Beach, California.

AMATEUR VANITY CALL SIGN SITE DEBUTS

(Tnx ARRL Ltr v18 #42)

A new site devoted to vanity call signs has appeared at <http://www.carroll-usa.com/vanity/>. Among other things, the site lets users find out if a call sign already has been submitted to the FCC, lists soon-to-be-available call signs, and includes a list of "creative" call signs. Michael E. Carroll, AA4BP, Huntsville, Alabama, is the Webmaster.—thanks to J. D. Delancy, K1ZAT

VANITY GRANTS UNDER ULS COMING SLOWLY; APPLICATIONS OFF

(Tnx ARRL Letter v18, #41)

The FCC appears to have granted upwards of 90 vanity call signs since October 1, but vanity call sign processing under the new Universal Licensing System still is far from routine, and the number of applications seems to be down. No new vanity call signs have been granted since October 7, and the FCC's ULS Task Force says it does not plan to resume issuing vanity call signs until all the wrinkles have been worked out of the system.

"We don't want to go any further until we are comfortable with how the system is processing vanity," a spokesperson for the ULS Task Force said. The FCC had hoped to have routine vanity

processing in place by October 1.

Only a tiny percentage of amateurs have even registered for the ULS. Registration now is a prerequisite to filing an FCC application on-line or on paper. The FCC says approximately 3% of the 740,000 amateurs in the FCC's database have registered for ULS—some 20,000 hams in all.

As of October 14, the FCC had processed vanity applications submitted through August 4. The ULS Task Force reports that it has identified a few programming problems that now are being worked on. "We also are investigating a few call signs that do not appear to be available and should be," the spokesperson said.

The number of vanity applications filed since just before the FCC deployed the ULS seems to have dropped sharply. In the pre-ULS era, it was not uncommon for the FCC to process more than 1000 vanity applications a month—most of them filed using the old electronic application on the Internet.

Since the ULS went into effect for the Amateur Service in August however, it appears that only about half that many vanity applications have been filed.

The difficulty of filing an application for a vanity call sign or any other purpose has been a source of mounting frustration within the amateur community.

GETTYSBURG FCC OFFICE TO GET MONITORING ANTENNA

(Tnx ARRL Letter v18, #40, 10/8/99)

In October, the Army Corps of Engineers will install an all-band delta loop antenna at the FCC's Gettysburg facility. Among other purposes, this system—at a height of 75 feet—will assist in real-time monitoring of the Amateur Radio Service and serve as a "force multiplier" for the High Frequency Direction Finding Center in Laurel, Maryland.

FAR Meeting Minutes

October 13, 1999
Takoma Park, MD



The meeting was called to order at 8:00 PM on October 13, 1999 at Columbia Union College in Takoma Park, Maryland by Recording Secretary Dan Blasberg/KA8YPY. There were 16 representatives representing 16 clubs, Those in attendance where:

Don Kirby, KR3A, Calvert ARA
Dan Blasberg, KA8YPY, Laurel ARC/GMRA
Tim Titus, W1TRT, Columbia ARA
Ed Mumford, N3IRO, Frederick ARC
Mildred Mumford, N3KGQ, Frederick ARC
Neil Spokes, AB4YK, Fauquier ARA
Tony Young, WA3YLO, AARC/MEPN
Chip Weems, W4PBG, HEMARC
Jerry Gavin, NU3D, Maryland Mobileers
Rachel Gavin, N3USN, Maryland Mobileers
John Sleeman, N3FXC,
Washington Adventist ARA
Mary Morris, N4TCI, Mt. Vernon ARC
Jeane Rexroad, N4ZGI, NCAC
Hugh O Donell, W3FUO, Goddard ARC
John Klim, N3KHK, Silver Spring Metro Ctr. ARC
Joe Saunders, K3UAL,
Capitol City ARS/Metro Comm. Network RC

Secretary s Report - The minutes for September were approved as mailed.

Treasurer s Report - Tim Titus/W1TRT provided a current statement of standing. There are still several outstanding.

Auto Call - Tony Young/WA3YLO reported that there was nothing new to report. Mildred Mumford/N3KGQ reported 36 subscriptions and 0 single copies sold at FARFest and 9 subscriptions and 4 issues sold at the CARA Hamfest.

Survivors Assistance - Tony Young/WA3YLO reported that survivor s assistance did well at FARFest. Tony still has several old account with some items in them, but reports no new accounts. If you are looking for anything, he can be contacted at Tonyy@juno.com

Scholarship - There was no report as Hugh Turnbull/W3ABC was not in attendance.

ARRL Report - There was no report as Hugh Turnbull/W3ABC was not in attendance.

FARFEST - The FARFest committee is soliciting comments, complaints and suggestion from those people that attended the FARFest at its new location. Please-mail all such material to Dan Blasberg/KA8YPY at Blasberg@BellAtalntic.net The Committee will hold its debriefing at 1900 on Wednesday October 20 at the College Park IHOP located at the interchange of I495 and US Rt. 1. For directions, contact Dan Blasberg at Blasberg@BellAtlantic.net

Old Business -

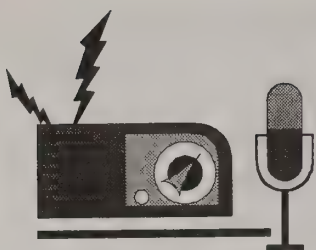
Sales Tax - Tim Titus/W1TRT reported that he has received a copy of paperwork from Hugh Turnbull/W3ABC, from the Rochester, NY hamfest organization. Tim will review the material and see what may pertain to FAR s situations.

Tony Young/WA3YLO brought up a suggestion for free shack sales advertisement in Auto-Call to subscribers. During the discussion, it was decided that subscribers would be limited to two advertisement per year. The issue was voted on and passed for Tony to approach Auto-Call Editor/John Queen for his comments and limits on how much and how many listings a subscriber may have.

New Business -

ARRL Affiliation was brought up by Tony Young/WA3YLO. The Recording Secretary, Dan

Continued on page 16



DX DX DX

By John Kanode,
N4MM

DARC DX AWARDS

The Deutscher Amateur Radio Club (DARC) offers some very nice and challenging DX Awards. One of the oldest and renowned of all the DARC DX Awards is the Worked All Europe (WAE). This award is given for working many European countries on different bands. Each confirmed European country counts 1 point per band, with a maximum of five claimed bands per country. DX stations outside of Europe may count 2 points for any contact on 80 or 160 meters. The WAE is given for all two way CW or all two way phone. There is NO mixed award.

There are three classes of the award. WAE-III is for at least 40 different countries and 100 or more points. WAE-II is for at least 50 countries and 150 or more points. The WAE-I is for at least 55 countries and 175 or more points.

Just recently added is a WAE Top Trophy for at least 70 countries and 300 points. Deleted countries do not count for the Top Trophy but do count for the WAE-I,II,III awards. The Award Manager for the WAE is Michael Adaszewski, DL5ARX, Postfach, Suhi 3, D-98509, Germany.

The DARC has a nice record and rule book for keeping records for the various awards. The awards booklet is available from the award manager for a self address label and postage. IRCs and US \$ are accepted. QSL cards are required for the awards and can be checked by your club awards manager or an official of your national society qualified to check QSLs for awards purposes.

I have many of the DARC awards and plaques and they are well worth working for.

UPCOMING DX CONTESTS

ARRL 160 Meter Contest	Dec 3-5
ARRL 10 Meter Contest	Dec 11-12
OK/OM DX RTTY Contest	Dec 18
Stew Perry Contest	Dec 18-19
Croatian CW Contest	Dec 18-19
RAC Canada Winter Contest	Dec 19

TIDBITS

Jim L. Dionne, KIMEM passed away on October 12, after a long illness. Jim was the CQ WAZ Award Manager for a long time. At this time, CQ Magazine has not named his replacement.

The Double Trouble DXpedition was very successful, they made 45,700 QSOs from T31 and 24,300 from ZK3.

N4AA is now the QSL Manager for KC4CD/HR2. He also is the manager for 9N1AA but he has not received any logs since October 1998.

ODSNJ reports that IRC's are useless in Lebanon. Please do not send IRC's with QSL requests.

From December 1, 1999 to January 5, 2000, stations in Panama will be using special prefix 3F to commemorate the turnover of the Panama Canal to the Republic of Panama.

The YASME Foundation has a new QSL manager, Randy Wright, 18432 Milmar Blvd, Castro Valley, CA. 94546.

The Board of Directors of the New Orleans International DX Convention voted to dissolve the convention. Faced with a financial deficit and flat attendance s, a majority of the board were no longer willing or able to justify the extensive amount of work and effort that was required to maintain the convention.

9U5D, Burundi will be active until Christmas time. His documentation has been accepted by the DXCC Desk.

Being Ready to Help—Y2K or Whenever!

Depending on who you talk to about Y2K, New Year's Eve could be anything from "a non-event" to "the end of the world". Since it's better to be prepared in any case, many Metropolitan Washington jurisdictions are already planning to activate amateur radio to some extent on New Year's Eve. In an effort to test their emergency plans and practice their problem solving skills the Council of Governments (COG) held a regional exercise on September 1 and amateur radio played a role at COG and in all but one participating jurisdictional Emergency Operations Center (EOC).

Members and friends of the Venturing Crew (formerly Explorer Post 80) operated a Net Control Station on the National Capital ARES Council (NCAC) Resource Repeater, compliments of the Northern Va FM Association, directing communications between COG and jurisdictions, fielding requests for information and referring hams interested in volunteering to the appropriate local repeater.

It was a successful—though not flawless—exercise. With the exception of COG's role being undefined and some other minor changes, the plan will be largely the same on New Year's Eve.

Organization is focused primarily on locally anticipated need and may vary widely from jurisdiction to jurisdiction. Amateurs should make contact with local RACES officials for details and to plan for provision of equipment at key locations (EOCs, Public Safety, Hospitals, Red Cross, etc.) which may require antennas or alternative power sources.

Other than local communications, jurisdictions may need a link to state capitals or adjacent states.

Assistance may be needed in other areas more seriously effected than your own. You may simply be asked to check in periodically to see if you are needed. Be ready! A list of local repeaters and simplex frequencies is included.

The Maryland Emergency Management Agency will be in a new EOC at Woodensburg by New Year's Eve and the state's auxiliary communications plan is still being developed. You can look for further information on their web page at mema.state.md.us.

The Virginia Department of Emergency Services will be using District State Police Headquarters' microwave system to send local communications to Richmond. Each of the fifteen Districts will provide a backup link on HF using operators at home stations with emergency power. How Can We Get Ready?

We need to do our homework. There are any number of sources for related information. I recommend several sources developed for ARES Institutes that could be helpful. Simplex Operations (if repeaters go down), Auxiliary Power Sources and Testing and Using Used Batteries (if the power does go off—and stay off for any length of time) to name a few.

They can be found in the "Library" at ARESVA.org. Share information with others.

Personal Emergency Planning (forget about Y2K) is something we should all be doing anyway. If new Year's Eve passes and the lights are still on, we should still be ready. It's possible more people are inclined NOT to prepare for Y2K than anything else. In all the hysteria over date changes and imbedded chips we've missed something important. We're sick of hearing about it—so we won't talk about IT anymore.

Let's talk about snow, ice storms, tornadoes, hurricanes and flooding. We could have very easily have gotten the rain and flooding Franklin, Va and

Continued next page

North Carolina got from Hurricane Floyd! These types of incidents (as if weather were the only thing we have to worry about) can cause our power to go off, putting you in the cold and dark, maybe without water or a dialtone. This is especially critical if you have elderly, infirm or very young family members. You can't—and shouldn't—volunteer (even in an emergency) If you have to worry about your family at home.

Do you have enough groceries at home (the kind that don't require refrigeration) to last you for a week or more? While you might have to forgo a hot bath, you'll still need water to drink. Canned food and bottled water can be stored, rotated and used periodically.

You'd need to provide for special needs of your family members like medication and diapers. Don't forget your pets!

Unless you don't mind sitting around in the dark, you'll want to think about lighting. Batteries are OK for short-term, but they won't get you through the latest Tom Clancey novel. Candles pose a huge threat (almost a promise) of injury and fire—especially over an extended period. Oil lamps are better, but remember what happened to Mrs. O'Leary's cow and keep them out of reach of the kids.

If you don't have benefit of a wood stove or fireplace you might consider other means of staying warm—like blankets and layered clothing. Kerosene heaters must be used carefully by following the instructions and using them in a ventilated area. You can't smell carbon monoxide like many other gasses and entire families have gone to sleep—never to wake up! If you have anything but a total-electric home, you should have a carbon monoxide detector anyway. You should change batteries in ALL detectors twice a year.

Battery and solar powered radios as well as those that wind up can come in handy for finding out what's going on around you. Check in to local repeaters on a schedule for updates instead of leaving radios turned on (unless you live on

Gilligan's Island). Give the topic some thought if you haven't already. Plan ahead and don't wait until the snow starts to head to the store—there will probably be thousands of other people doing the same thing.

If you never need any of it because of an emergency—that's fine. Its better than needing it and wishing you had it!

Repeaters (R) & Simplex (S) Frequencies:

NCAC Resource Repeater: 146.910 (R)
(regional coordination & information)
District of Columbia: 448.875 R; 146.505 S
PGCounty: 145.350 R; 146.88 R; 146.520 S
Montgomery Co: 147.180 R pl 156.7; 146.460 S
City of Alexandria: 146.655 R; 146.490 S
Arlington Co: 145.470 R; 146.430 S
Fairfax Co: 146.790 R; 146.595 S
City of Falls Church: 445.975 S
Prince William: (east) 147.240 R; 147.525 S
(west) 146.970 R; 146.475 S

FAR Minutes, from page 11

Blasberg/KA8YPY will fill out and send in the necessary forms.

Announcements:

-NCAC

October 24: Marine Corps Marathon

October 30: National Airport Mass Casualty Exercise.

-Mason Dixon Hamfest October 24

-Washington Adventist ARA will host Riley Hollingsworth as a special guest speaker, Sunday October 24 at 1600 at the Columbia Union College in Takoma Park, Md.

Meeting Adjourned at 8:45 PM. The next meeting will be held at 8:00 PM on Wednesday November 10, 1999 mat the Lee Center in Alexandria, VA.

Respectfully submitted, Dan Blasberg
KA8YPY, FAR Recordings Secretary



Elmer's Corner

By Fred M. Griffiee,
N4FG

Antenna Tuners or Matching Networks and Some General Discussion

First, I wanted to mention antenna tuners and matching networks since they are the same to most of us. But actually, the tuner performs impedance matching and doesn't do much antenna tuning. Even with the tuner placed at the apex of the antenna, it is performing impedance matching.

There is always the question regarding tuning as to whether the antenna is being tuned, especially when using low loss transmission line like the popular ladder line or even home brew balanced wire line.

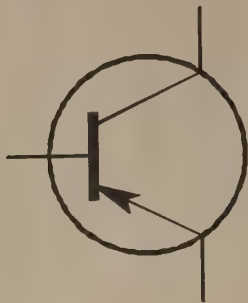
For 100 foot lengths of line, the matched line loss is low for most any type of transmission line. But the SWR at the load or antenna apex feed point can be pretty high. Therefore, the so called SWR loss can be relatively high, especially for coaxial cable since its characteristic impedance is going to be around 50 to 75 ohms. But the ladder line types have a higher characteristic impedance of 300, 450, or 600 ohms, and therefore, when the apex impedance is high, the SWR is much lower. Therefore, the SWR loss will be much lower for ladder line types and the efficiency is going to be much higher. In my own case, my antenna system uses tuned feeders and therefore realizes an overall efficiency for any ham band of over 90 percent while coaxial cable would show much lower efficiency on almost all bands – unless the antenna is resonant on a particular band.

Another area that always confuses many is the statement many make that the reflected power is returned to the antenna, absorbed, and radiated. That would be nice. Unfortunately, the reflected power continues to travel along the transmission line and is given up as heat rather than being

radiated. For coaxial cable, it is going back and forth on the inside of the shield (with some on the external surface of the shield) and the center conductor while for ladder line, since the currents are 180 degrees out of phase, they cancel so the only radiated power is what the antenna accepts. However, if a matching network (antenna tuner) is used at the input or drive point of the ladder line, then the conjugate match at the apex of the antenna is pretty close to being what it should be for lengths of 100 foot or so. This is almost like having the matching network at the apex of the antenna but because there are losses, it isn't quite true. But it is fairly close and therefore does a pretty good job of matching. The impedance the antenna apex sees is nearly equal to the apex impedance itself but the reactive components are opposite in phase. Therefore there is maximum power transfer experienced.

Still another thought by many is that the reactance cancels when the antenna tuner is adjusted for an input of close to an SWR of 1:1. Unfortunately, this doesn't occur. The only thing that does occur is the occurrence of an equal impedance to the load at the tuner output that is opposite in phase to the load impedance itself. In the process, the input impedance of the tuner becomes equal to nearly 50 ohms. The theory of maximum power transfer was proved many years ago by a scientist named Thévenin where he showed the reactance cancelling but actually, it is only a part of the mathematical proof and really does not cancel in practice. The conjugate impedance match is actually what occurs and is covered in many text books used for class room instruction.

Next month, I will discuss transmission lines in more detail. Also, I will include some matching network equations I derived that allow the calculation of various network component values by using phase rather than other variables that are used in most design approaches. By using phase, for a T-Network for instance, all component values can be determined in one step and varied to determine what values show maximum network efficiency.



Amateur Radio Training

John Forrest WZ4A
6111 Burnett St., Alexandria, VA 22310
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703) 644-3920
Anne Arundel RC	Tony Young WA3YLO	(301) 262-1917
Arlington ARC	Mike Callahan NW3V	(703) 241-5618
Antietam Radio Assn.	Robert Long KD3JK	(301) 824-5132
BRATS (Baltimore)	Joe Chidester W3SHZ	(410) 602-0353
Baltimore ARC	HAM-TALK, BARC Voice Mail	(410) HAM-TALK x3835
Central MD ARC	Jim Tilton KD3JA	(301) 552-0012
Charles County ARC	Joseph Sartori WB3IUT	(301) 753-6320
Dulles ARG	Michael Weber WB8RDN	(703) 450-2304
Fauquier ARA	Neil Spokes AB4YK	(540) 364-3861
Frederick ARC	Hal Silverman W3HWC	(301) 831-7946
Historical Electronics ARC	Rol Anders K3RA	(410) 796-4792
Laurel ARC	Pud Reaver W3YD	(301) 498-6293
Mid-Atlantic DX Assn.	Michael Vaia, WB8VBW	(301) 738-3861
Madras	Larry Ziecheck, N3GKZ	(301) 984-6113
MD Mobileers ARC	Bruce Colburn AA3KR	(410) 437-1891
Montgomery ARC	Rocky Jones KC4UXO	(301) 216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703) 971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301) 249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703) 361-3091
Pentagon ARC	David Boyd K9MX	(540) 659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301) 862-2214
Shenandoah Val ARC	Fred Wetzel W4KRT	(540) 678-0394
Southern MD ARC	Vic Curtis WA3YUV	(301) 888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410) 586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(540) 659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703) 430-4149
Tri-County ARC	John Creel WB3GXW	(301) 572-5124
Vienna Wireless	Kurt Wehle, WA4SMI	(703) 534-3905
Woodbridge Wireless	Jim Duffey WD4AIR	(703) 491-3170



Volunteer Examiner Cooperative

JOHN FORREST WZ4A
6111 Burnett St.
Alexandria, VA, 22310
(703) 971-3905

* Volunteer Examiners may refuse to test any applicant who fails to demonstrate to the VE's satisfaction that the memories in the applicant's calculator are empty. If you bring a calculator to an exam, please be prepared to demonstrate that your memories are empty.

* Effective January 1, 1999, the maximum FCC authorized exam fee is \$6.49.

* The FCC now requires Social Security Numbers (SSN's) for all applicants for new licenses, upgrades, and renewals. Please be prepared to provide SSN's at all VE exam sessions.

* Attention VE's - Please send your Y2K exam dates to WZ4A soon to guarantee inclusion in upcoming issues of *AutoCall*.

1999/2000 Schedule of Examinations

December 2 (Thursday)	Martinsburg, WV - Mid-Atlantic DX and Rptr Soc. and Winchester ARS (ARRL VEC) Pre-Registration Preferred, Limited Walk-In Contact: Greg Lanham KU4AN (540)722-4792 kuan@visuallink.com Alan Moeck WA2RPX (540)869-1117 arm@visuallink.com
December 5 (Sunday)	Landover, MD - DCMARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 Day (301)773-2898 Night
December 7 (Tuesday)	Alexandria, VA - Alexandria Radio Club (ARRL VEC) Pre-Registration Preferred, Contact: Rich Adamy KA4GFY (703)644-3920 ka4gfy@arrl.net

Don't forget to bring your license when upgrading!!

December 11 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In New Location This Month Only - Call for Directions Contact: John Forrest WZ4A (703)971-3905, Frank Mackey K4EC (703)455-1510
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Oscar Ramsey NV3G (301)262-3392
	Cumberland, MD - (Laurel VEC) Walk-In Contact: Gay Rembold W3DFW (301)724-0674

December 12 (Sunday)	Middletown, VA - Winchester ARS (ARRL VEC) Pre-Registration Preferred, Limited Walk-In, Contact: Greg Lanham KU4AN (540)722-4792 kuan@visuallink.com Alan Moeck WA2RPX (540)869-1117 arm@visuallink.com
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January 2 (Sunday)	Landover, MD - DCMARC (ARRL VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 Day (301)773-2898 Night
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January 8 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: John Forrest WZ4A (703)971-3905 Frank Mackey K4EC (703)455-1510
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Oscar Ramsey NV3G (301)262-3392

February 6 (Sunday)	Landover, MD - DCMARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 Day (301)773-2898 Night
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February 12 (Saturday)	Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: John Forrest WZ4A (703)971-3905 Frank Mackey K4EC (703)455-1510
	Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Oscar Ramsey NV3G (301)262-3392

Don't forget to bring your license when upgrading!!



Alexandria Radio Club

Meetings: Second Friday of each month, 7:30 PM at the Alexandria Fire Department Administrative Office (co-located with Fire Station #54), 900 Second St., Alexandria, VA

Nets: Every Thursday at 8:00 p.m. on 147.315 output / 147.915 input. (W4HFH repeater)

Web page: <http://members.aol.com/N4CWP/W4HFH.HTML> (or search on Yahoo: W4HFH or Alexandria Radio Club).

Information: Rich -KA4GFY, 703-644-3920.

Well, Rich and the other instructors are about halfway through the Tech Class. This is the first class we've done in a long time. Rich has been doing a great job of keeping the class on track and we have reversed a long standing trend in such classes. Not only have we not lost any students, I think we've picked up a few new ones. Our testing date will be December 7th. Some of us in the club are going to try to upgrade. Should be a very interesting session. The class has also given the club the opportunity to expand and add some new members who are also new to Ham radio. Welcome !!! I believe that the success of the class is due to the quality of the classes as outlined by Rich KA4GFY and presented by the current members of the club.

I want to thank George KR4MU for the October program on traffic handling, I was in Florida and got chased home by Irene. The role of ARES hit home as I was running up the west coast of Florida with Irene hours behind. Two Meters == Don't leave home without it ==.!. I understand that George did a wonderful job and hopefully we can get him back for another program next year.

I also want to thank the Grid Pirates, VHF contesting group for the November program. The effort and the accomplishments are just amazing. The technology is just as amazing.

Some of us did assist in the Marine Corps Marathon. Many things were changed this year. The most interesting was the move to simplex operations. Our past experience with simplex at various public events was not good. The problem has been with the use of handhelds on hips and limited coverage both on transmit and receive due to body interference. The folks at the MCM were using high power mobiles and base antennas on masts to make the longer simplex ranges work. I think Ed KE4SKY has made a great contribution to the readiness of ARES in the area by demonstrating, by way of the Friday night ARES simplex net (146.415 at 8:30 PM) the value of simplex. Both Harry N4CWP and Rick N4ASX worked aid stations.

As with the last few years, we invited the cub scouts to participate JOTA or Jamboree on the Air. This year we did not get a great turn out but our one guest Cub Scout came with his own code practice oscillator. Make Rich's KA4GFY's day! We are coming to the end of the year and our December meeting will be the election of officer's for 2000. Our practice has been to place in nomination the current officers for a maximum of two years (new term limits in the by laws). Our current secretary Karen is in her second year and we will need nominations. All of the officer positions are open for nominations and we encourage all members to make this meeting and vote.

We are also talking about a dinner out in December at a place that doesn't have a steam table or provide food in bags. If you have an idea as to where we might do this bring it up at the next meeting.

Many of the club members worked the CQ World Wide Contest on the weekend of Oct 30th. Harry, Rick and Rich all did well. Rich made several DX contacts on the hidden condo long wire and the down spout of his building. WELL-DONE Rich. What is the gain on a down spout antenna on 15 meters???

73 Rick N4ASX.



Arlington Amateur Radio Club

Meeting: Third Tuesday of each month, 7:30 P.M., Red Cross building, 4333 Arlington Blvd., Arlington, VA. Nonmembers welcome!

Net: Tuesdays (except meeting nights), 7:30 P.M., 144.87/145.47 Mhz FM.

Information: Mike Callahan, NW3V @ W3TOM, callahan@tmn.com, (703) 241-5618.

WWW: <http://www.geocities.com/CapeCanaveral/Lab/4306/>

Minutes of the October 19, 1999 meeting of the Arlington Amateur Radio Club

President Jack WA4FXX called the meeting to order at 1942L. Also attending were Alan, KO4ALA, Tom N4BYF, Eric KG4DZA, Walt KT4EL, Rick KA0KLE, George KR4MU, Mike KA8OPJ, Dennis, W4PWF, Joe KJ4S, and Mike NW3V.

The minutes of the September meeting as published on the Web page, and the treasurer's report as submitted, were approved.

There was no news from FAR. W4PWF reported that classifications on VA's ARRL license plates are available on the ARRL web page. The spread spectrum report and order has been approved by FCC, essentially allowing any spreading technique above 420 MHz. There is no news on license (class) restructuring. Approximately 3-4% of hams have registered under the ULS; paper will be allowed until February.

KO4ALA reported planning for an exercise at National Airport on 10/30. An early start will accommodate heavier taxing traffic later in the day.

Alan will also help arrange coordination

meeting for the Y2K/New Years Eve activities. Further discussion of planning continued until adjournment at 2052L, after which some shack Spring cleaning was done (6 months early!).

Respectfully submitted,
Mike KA8OPJ, Secretary



Baltimore Amateur Radio Club

Meetings: The Club meets every first and third Wednesday of every month at 7:30 P.M. at 12360 Owings Mills Blvd., Reisterstown, Maryland.

Mailing Address: The Baltimore Amateur Radio Club, Inc., P.O. Box 120, Reisterstown, Maryland 21136-0120.

On The Air: Repeater system (W3FT), 146.07/146.67 (PL 107.2), 222.64/224.24, 444.625/449.625 (PL 107.2). The Baltimore Traffic Net meets daily at 6:30 P.M.

Website: <http://www.baltarc.com>.

Club Information: Dial 410-581-8828 or 410-HAM-TALK anytime.

The Baltimore Amateur Radio Club is very excited about all that is going on within the club. Most exciting, BARC is finally going to have a place to call home! At the time of this publishing, BARC will have it's new "Meeting & Training Facility", and this facility will be located in the Reisterstown area. The club intends to have a working shack as well as gear prepared for any emergency or any special event. We hope all members will come see our new home, and we hope all perspective members will come, too.

As always, our club is already having regular meetings to start preparing for the year 2000 Hamboree. There was not much of a rest from last year's Hamboree, and the club has jumped right into planning the many aspects of holding a successful hamfest.

BARC's repeater system is shaping up. With the help of Hale Adams, N3NYC, our Repeater Chairman, Phil Hebert, N3CDY, and others, our club's repeater system continues to provide great service to the Baltimore area. And it continues to improve.

BARC's web page has been updated and offers all kinds of wonderful information. Thanks to the efforts of Doug Whitteck, N3VEJ, and others, there has been rave reviews about our web sight. Check it out and see for yourself! Again, the address is <http://baltarc.com>.

And finally, the Baltimore Amateur Radio Club is holding it's annual Awards Banquet on December 18th. All members and their guests are urged to come! We always have a good time, and this year should be no different!

Until next time, 73, Brooks, N3VNC



Central Maryland Amateur Radio Club

Meetings: 4th Friday of the month at 7:30pm, at the Doctors Community Hospital, 8118 Good Luck Road, Lanham, MD (no meeting in December). Enter in the Outpatient Testing entrance across from the Emergency Room entrance behind the main building. Take the elevator to the 5th floor and exit left, the meeting room (DSE Room) is on the right.

Repeater: N3EZR/R 145.230 Mhz. Transmit a 110.9 Hz CTCSS Tone for full area coverage. No tone necessary for local coverage.

Net: Every Tuesday, 9:30pm, 145.230 MHz repeater.

Mailing Address: Central Maryland Amateur Radio Club, P. O. Box 788, Greenbelt, MD 20768-0788.

Information: Jim Tilton, Pres. - KD3JA, (301) 552-0012.)

Web Page: <http://www.erols.com/jctilton/cmarc/>.

Officer Elections Held at October 22 Meeting: Officer elections were held at CMARC's October 22nd meeting. The slate of officers offered by the nominating committee was elected by acclamation. CMARC officers for 1999/2000 year are Jim Tilton/KD3JA, President; Mike Rafatjah/N3UEZ, Vice-President; Chuck Haglegans/N3ODK, Secretary, and Tony Fominaya/N3JWT at Treasurer.

Novice/Technician Class Going Strong Testing Offered CMARC is conducting an entry-level Amateur Radio class leading to an FCC Novice and/or Technician class license. The class is being held weekly on Saturday mornings at the Doctors Community Hospital in Lanham, MD. Testing will be held on November 20th and December 18th at Doctors Community Hospital. Testing is open to any prospective ham, whether or not they attended the CMARC class. Non-class attendees, however, should pre-register for testing by calling Jim Tilton/KD3JA days at (301) 286-9510 or evenings at (301) 552-0012, or by sending him email at jctilton@erols.com.

CMARC Participated in the Jamboree on the Air Jim/KD3JA used the club's radio equipment at the Jamboree on the Air at the Boy Scout Camporee at Fort Washington Park on October 16th. It was a totally portable/emergency operation, running exclusively on battery power! Numerous Scouts had the opportunity to talk over Amateur Radio with other Scouts at locations in Pennsylvania and Maryland.

CMARC Planning for possible Y2K and Snow Emergencies During November member of CMARC will be meeting with representatives of Doctor's Community Hospital and the Greenbelt, MD Police Department concerning preparations for possible Y2K and Snow Emergencies. Final coordination will occur at CMARC's November 26th meeting. Contact Jim/KD3JA (see above) for details.

CMARC's Holiday Party will be December 18th CMARC 's Holiday Party will be at 6pm on

ANNOUNCING
THE 2000
B.A.R.C. "IT'S FREE" MINI-FEST

WEDNESDAY, JANUARY 19TH 2000
MARYLAND STATE FAIRGROUNDS
TIMONIUM, MARYLAND

ADMISSION IS FREE ! • TABLES ARE FREE!

FOR THE ENJOYMENT OF THE AMATEUR COMMUNITY
SPONSORED BY:

THE BALTIMORE AMATEUR RADIO CLUB, INC.
DOORS OPEN AT 5 P.M., RUNS 'TIL 10 P.M.

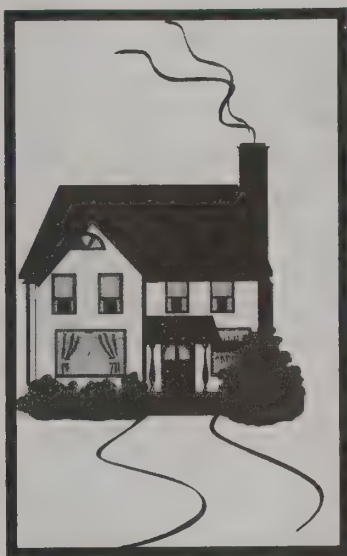
DON'T WAIT 'TIL SPRING
COME TO THE B.A.R.C. "IT'S FREE" MINI-FEST
OUR ANNUAL MID-WINTER INDOOR
AMATEUR RADIO AND ELECTRONIC
FLEA MARKET AT THE FAIRGROUNDS
THE BEST BARGAIN OF THE YEAR!

EVERYONE IS WELCOME
NO RESERVATIONS ARE NEEDED
FIRST COME, FIRST SERVED
BRING YOUR STUFF,
JUST SET UP A TABLE,
PUT IT AWAY WHEN YOU'RE DONE,
CLEAN UP YOUR TRASH
THAT'S ALL THERE IS TO IT!

**FOR MORE INFORMATION: DON'T WRITE
JUST DIAL: 410-HAM-FEST**

TALK-IN ON 146.67-
THIS IS A B.A.R.C. APPROVED MINI-FEST

RADIO TELEVISION MUSEUM



LOCATION: Bowie, Maryland

OPEN: Saturdays and Sundays

HOURS: 1-4 PM

ADMISSION: Free

DIRECTIONS: Route 50 to route 197 south. Proceed to Mitchellville Rd and turn right. Continue for 1-2 miles to the intersection of Mount Oak Rd where the museum is located in the *historic 3 story "red" Harmel House*

SPECIAL GROUP TOURS: Call number below.

Come visit the new Radio Television Museum in Bowie, Maryland. The exhibits are fascinating for antique radio/TV buffs, radio amateurs and the general public. Take a walk back in time that brings back memories for some and provides evidence of the electronic evolution for others. Some of the exhibits include:

- ♦ part of the original *transatlantic telegraph cable* started in 1857.
- ♦ the *first miniature tube* designed for World War I, but never used.
- ♦ the *tabletop radio* made famous in the popular TV series, "*The Waltons*".
- ♦ the *DeForest Audion tube* used by Edwin Howard Armstrong's regenerative receiver.
- ♦ *two levels* of rooms packed full of antique *radios, radios and more radios /tvs.*
- ♦ a quiet atmosphere to *relax*. Tour guides available or walk-through at your own pace.

♦
(Courtesy of the Radio History Society. Design by Murray Green, K3BEQ.) See QST, Nov 99, for more details.

(301-390-1020)

December 18th at the New Carrollton Bible Church on Good Luck Road (just inside the Beltway). The party will be pot-luck, with punch and a party platter provided by the club. As we do every year, our gift exchange will be conducted via a "Chinese Auction".

73 de Jim/KD3JA



Charles County Amateur Radio Club

Meeting: General membership meeting first Friday of every month at 7:30 PM in the Office of Emergency Preparedness, Charles County Government Building, 200 Washington Ave, La Plata, MD. All are welcome. Mailing **Address:** Charles County Amateur Radio Club, Inc., P.O. Box 668, White Plains, MD 20695-0668.

E-Mail: K3SMD@QSL.NET

Repeaters: KA3GRW/R, 443.700+, La Plata, W6QMN/R, 145.39+(PL7Z), Hughesville, MD, W3ERU/R, 146.850, Blossom Point, MD.

Club Call Sign: K3SMD

Website: HYPERLINK <http://www.qsl.net/k3smd>

Information: Greg, WA3FSC (301) 753-4393

Greetings everyone. I don't know about you, but I'm trying to figure out what happened to this year. Here we are, already into the holiday season. Of course Christmas decorations were up in the stores earlier in the summer but that doesn't count. This has been a very eventful year for CCARC also. Most folks are still trying to recuperate from all the activities of September: the RACES activation for hurricane Floyd, the Fair, the Century Bike Race, and the Doncaster Horse Ride. Make sure that you keep checking the calendar of events on the web site for the latest on upcoming activities.

We have expanded the list to cover the next 12 months so you can get plenty of notice.

Bob, W3LZX, has been working hard on getting our activities arranged for the next few months and has some really exciting things coming. As he will explain, Tom Clarke got called out of town at the last minute so the APRS 101 that had been scheduled for the November meeting will be rescheduled to early next year.

Make sure that you mark your calendar for the January 7th meeting. Note that we will be starting this meeting at 7 PM instead of 7:30 PM in order to give the folks from the Goddard ARC/NASA time for their presentation on the Space Amateur Radio Experiment (SAREX) and Amateur Radio on the International Space Station (ARISS). This promises to be a very popular and interesting presentation that is open to anyone interested.

You want to also mark your calendars now for December 31st. The Charles County RACES will be activated to support the County's Y2K contingency operations at this time. Although we all know that this is a special party time, it is also a time when we have an opportunity to return something to our community. They are also counting on us. I look forward to seeing you there. I would like to acknowledge the outstanding efforts of Joe, WB3IUT, and Cliff, N3YYP, on their work with our Novice/Technician class going on right now. Joe started with 10 students and is still keeping them coming back. Cliff has been really great in helping them master the technical aspects of the program. Thanks to both of them for stepping up to this challenge.

On a related matter, Art, N3KUQ, has volunteered to assist with the development of the lesson plans for the Technician/General class we would like to put on in the spring. We need at least one other person to help Art with this task. This is setting up the program, not teaching it. Surely there are some of you that can put your experience and expertise to work and help get this going. Just let Joe, Art, or me know of your availability, we need your help.

Special congratulations go out to Rob, N2OMC, and his wife on the arrival of their new harmonic. Bet Rob doesn't have any problem getting awoken these days to make those early morning QSOs, hihi.

Make sure that you have our meetings on your schedule. You can keep up with our planned activities from our web site at <http://www.qsl.net/k3smd/upcoming.html>. Look forward to seeing you at the next meeting. Have a very safe and enjoyable holiday season.

73, Greg, WA3FSC



Columbia Amateur Radio Association

Club meeting: Every fourth Tuesday of the month at 7:30 p.m. at Room 401, Gateway Center, 6751 Gateway Drive, Columbia, MD, off Rt 175 near I-95. Monitor net repeater for directions.

Repeaters: 147.735/147.135 (cross-linked to 222.32/223.92). Net Repeater. PL control of 156.7. 147.990/147.390. Open autopatch and direct dial 911. 222.32/223.92 (cross-linked to 147.735/147.135). 443.275/448.275 PL control of 156.7. 444.475/449.475. Autopatch & 911.

Mailing: Columbia Amateur Radio Assoc. (CARA), Box 911, Columbia, MD 21044.

Web Page: <http://www.qsl.net/cara/>

Activities: CARA breakfast: 9:00 a.m. on the second Saturday of the month at Jilly's Restaurant in the Enchanted Forest Shopping Center on Rte. 40. Contact Bob/KC3EV by 6:00 p.m. the day before the breakfast.

Information: Bob/KC3EV, 410-465-2421

Stormy CARA Hamfest

Didn't it rain on October 10th! This was the second year in a row that we had rain on our parade. The weather kept the tailgaters and crowds away but we still broke even on the hamfest. Dave, W3AJR, our hamfest chairman, assembled the

usual reliables to help with the set up and tear down. Many braved the rain to hand out sodden tickets to the hamfest junkies who would not be kept from their appointed rounds of good vendors and priceless relics. Early on we started parking cars in the tailgate section to help attendees get closer to the main building. Several tailgaters opted to locate inside so there was a pretty good showing on the floor. I actually did very well finding a nice Mirage 2m amplifier, a set of David Clark headphones, and a Weller variable soldering iron. Well there's always next year. After El Nino and La Nina we have to have a good year, Si?

Howard County Y2K Preparations Complete

In September, Chief John Frank of the Howard County Fire and Rescue Service explained to CARA members the broad plan in preparation for New Year's Eve. CARA's October meeting was a continuation on this theme, and our guest speaker was Captain Jay Zumbrun, Commander of the Northern District, Howard County Police Department. Capt. Zumbrun outlined the contingency plan the police have to respond to any Y2K glitches. There will be twelve "Help Centers" throughout the county located at fire houses, schools, and public points. So if there is a major communications breakdown, residents will be able to get help through their neighborhood network. There are also four water dispersal stations ready to dispense water should that become necessary. All police, fire, health, and safety personnel are in standby status over the millennium weekend so that if they are needed they will be at the ready. Howard County RACES/ARES have also been incorporated into the planning for communications backup. RACES/ARES provides shelter communications when the Emergency Management Center determines that those services are needed. The County is well prepared for a dramatic response in the unlikely event that Y2K will strike hard. We will be watching the approaching Y2K countdown for seventeen cycles before it strikes the U.S. East Coast to help anticipate effects. We expect little but are prepared for the worst.

Have a good holiday season and keep your batteries charged,

sending in your QSL to receive your certificate!

73 de Tim/W1TRT



Fauquier Amateur Radio Association

Club Call Sign: W4FAU

Meeting: 2nd Thursday, 7:30 pm at the Crestar Bank in the Warrenton Shopping Center (across from Safeway and Radio Shack) No meetings during July, August and December.

Repeater: NZ4N, 147.165(+)

Net: Every Wednesday night at 2100 hrs, local.

Packet: KE4YVU FARA7 node 145.070 Mhz w/direct connect to FBBS9, FBBS9 Bulletin Board 145.090, FARA9 node 145.090 Mhz.

Mailing Address: Post Office Box 752, Warrenton, VA 20187

Web: <http://www.mnsinc.com/ki4ro/fara.htm>

Breakfast: Last Saturday of the Month at the Town and Country Restaurant off of Route 29 in New Baltimore, VA. Time: 8:00 am.

Newsletter: TOROID, monthly ñ deadline for submissions is the 20th of the month. Editor can be reached at n4qpb@mnsinc.com

Next Meeting: September 9th

Hello, All, from FARA. We hope you had a safe and wonderful Thanksgiving. Just listed below a few of the things FARA has been involved with in the past couple of months and what's planned for the next couple of months....

October was a very busy month for FARA what with the Y2K SET, the regular meeting, participation in JOTA, and the N4M Special Event station (which celebrated the 24th running of the Marine Corps Marathon in Washington, DC), we hardly had time for our normal everyday employment!

For everyone who contacted our Special Event station, please note below the requirements for

A certificate may be obtained by sending your QSL to confirm contacts along with a 9" x 12" SASE to: FARA - Marathon, P.O. Box 752, Warrenton, VA 20188. Please note.....a 9"x12" SASE MUST accompany your QSL.

Just when we thought we would get a break, the pace continued on into November. On November 6th, FARA hosted a VE Exam Session in Warrenton. All participants of the class given by Neil, AB4YK, which led to the Exam Session, participated in the exam also.

At the November meeting, elections were held. The slate of Officers for 2000 will be noted in the next issue of *Auto Call*.

Plans for the upcoming FARA Christmas Dinner/Party which will be held on Saturday, December 11th, 1999, at the United Methodist Church in Marshall, Virginia, got underway. The event will be catered and if you'd like further information, please contact Duffy, KD6RNE at 540-788-3077 or Bonnie, N4QPB at 540-937-5687.

And, now, its December. The last month of 1999. As we look back in quiet reflection on all that FARA has accomplished and participated in over the past year, we'd like to take a few minutes to wish everyone a quiet, joyful, peaceful and safe Christmas. We hope that you will enjoy and share this time with your family, your friends and neighbors. And, we here at FARA would also like to wish everyone a wonderful and safe New Year. Enjoy the Season!!!!

73 — Bonnie, N4QPB



Reminder - all submissions for

AUTO CALL

are due no later than
the 1st of the month prior to the
month of publication!!



Green Mountain Repeater Association

Repeaters: *146.61 Cheverly, *146.88 Greenbelt. *(Autopatch).

Information: Roy Ashlin, N3NGA, (301)-210-7034

Mail: P.O. Box 572, Bladensburg, MD, 20710

E-mail: mgreen@erols.com.

Socials: Luncheon, 1st Saturday of each month at 11:30 A.M., Laurel Centre Indoor Mall Eatery.

Nets: 146.88 - Old Gent's Net, 9:30 A.M. and 6:30 P.M. every day. Washington Adventist Amateur Radio Association Net, every Thursday at 9:30 P.M.

CONGRATS TO NEW BOARD OF DIRECTOR MEMBER

Bruce Crabill, N3ZUY, has been selected to serve out the remaining term of Don Tinari, W3RYQ, who is retiring from the Board of Directors to pursue other endeavors. Bruce has been the thrust behind the software/programming for our new controllers. He is a computer/software guru at the University of Maryland and a former Foundation for Amateur Radio "Ham of the Month". Bruce resides in Bowie, Maryland. Congrats.

OPEN TO ALL AMATEURS; LISTEN TO YOUR VOICE PLAYBACK

Hands down, the autopatch/autodial is the most popular repeater feature. However, another great feature is the capability of hearing your voice transmission played back to you for up to 10 seconds. **THIS FEATURE IS NOW OPEN TO ALL AMATEURS AND IS AVAILABLE ON THE 146.610 AND 146.880 REPEATERS.**

Procedure:

- 1) Key your microphone, identify your station and press *21.
- 2) Un key and wait 1-2 seconds.
- 3) Key and test for up to 10 seconds.
- 4) Un key. (Your voice test will be instantly played back to you.)
- 5) Identify your station upon completion of test.

A great way to determine how your HT, mobile or base station sounds through the repeater(s). Try it. You will like it.

WANTED: A FEW GOOD AMATEURS!

GMRA is always looking for a few good Amateurs to participate as: Control Stations; Members of the Technical Committee; Assisting in the preparation of the Newsletter, to name a few. If you believe you are qualified and/or experienced, please contact me at 301-773-5730 or E-mail mgreen@erols.com. I will ensure that your request is routed to the appropriate GMRA representative. Giving has it's own personal rewards. Thanks.

IMPROVED NEWSLETTER PHOTOGRAPHS:

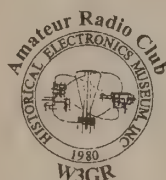
You will notice an improvement in the quality of the GMRA Newsletter photographs. We were fortunate to find a digital reproduction machine that seems to minimize or eliminate that harsh dark quality replacing it with clearer reproduced photographs. Typically, when a Newsletter is prepared on a computer, including scanned photographs, and then reproduced on a standard repro machine, the photographs tend to suffer clarity. The digital reproduction process is a definite improvement. (The digital equipment I used is available at the Annapolis Office Depot.)

RENEWAL TIME 2000; MORE IMPORTANT THAN EVER:

Yup, it's that time of year again. GMRA renewal. But this time, it is more important than ever. It is no secret that there is slow growth in the Amateur community. The numbers are stagnant or

down in the areas of testing, repeater activity and club membership across the nation for many repeater clubs, while the cost of electricity, autopatch telephone access and site insurance continue to rise. And unless there is more activity in the FM repeater arena, I suspect that you will see repeater systems begin to shut down due to lack of funding or features reduced. It is sad to see (and difficult to justify) wide area coverage repeater systems with multiple receiver (voting) sites as well as single systems, sit idle day after day with very little or no activity. We are fortunate that the 61 and 88 repeaters do not fall into that category during an average operating week, thanks to you. Please, complete and return your renewal form/dues as soon as possible as we approach our 29th year of operation. Again, thanks for your continued support.

73 Murray, K3BEQ



Historical Electronics Museum Amateur Radio Club

Meetings: Second Thursday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and Elkridge Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

Info: Nick Yokanovich, K3NY 410-544-5736

Club Station: W3GR.

Mail: P.O. Box 746, Mail Stop 4015, Baltimore, MD 21203.

Web Page: <http://members.aol.com/wk3p/se.htm>

Street address: 1745 W. Nursery Rd., Linthicum, MD 21090.

Award Presented

The highlight of the October meeting was the presentation of the nationwide Herb S. Brier

, W9IE, "Trainer Of The Year" award to Rol Anders, K3RA by Hugh Turnbull, W3ABC on behalf of the ARRL. Hugh also talked to the club about the latest news on licensing restructuring and FCC enforcement of the amateur rules. The open discussion following the talk was indeed spirited. Hugh did a fine job in putting these two critical issues into both historical and contemporary perspective.

Visit W2W on Pearl Harbor Weekend

On Saturday December 4th and Sunday December 5th 1999, HEMARC will operate as W2W for the third annual Pearl Harbor Day Memorial special event station. W2W will operate from 1400Z (9AM EST) to 2200Z (5PM EST) on SSB and CW in the novice/general portion of at least the 40, 20 and 15 Meter bands. A special 8x10 certificate will be available in return for a QSL with two 33 cent stamps. Come see us or drop in at the museum.

W3GR hosts JOTA visitors

Thanks to hard work by Gary Ryan W3GMY and Chuck Angel AA3FB, the recently moved W3GR station was made partially operable for its use in the Boy Scouts Jamboree On The Air. Nick Yokanovich, K3NY and Mike Conlon, KB3CPV operated the station with a local scout contingent. This allowed the local scouts to participate in this nationwide hamming event by talking to other scouts in many other states.

In preparing for the JOTA event for the last few years, it has become apparent that the leadership of the local Boy Scout movement is in general poorly informed about amateur radio. In hope of starting a little change in this mindset, HEMARC has reserved a table at the Cub Scout Pow Wow Saturday 13 November 1999 at the Randallstown High School. This will expose hundreds of scout leaders to amateur radio.

Novice/Technician Training is off to a good

start with 24 enrollees.

December Technical Session

Henry Lee, KB1PE, will start the December 9, 1999 meeting with a presentation on low frequency radio waves. European hams have been working on their VLF hamband for several years and now a select group in the US has been given an experimental ticket for a few VLF frequencies as an experiment. A very old and very new aspect of ham radio. Visitors are welcome.

73 Chip W4PBG



The Maryland Apple Dumping Radio Amateur Society, Inc.

Meetings: 2nd and 4th Thursdays - 7:00 P.M.
St. Paul's Church, 10401 Armory Avenue,
Kensington, Maryland 20895.

Clubhouse: MADRAS Clubhouse, 11800
Coakley Circle, Rockville, MD 20852

Nets: 1st and 3rd Thursdays at 9:00 P.M. on
145.45 MHz (PL-5A).

Repeaters: 444.100/449.100 MHz (PL-2A),
145.45/144.85 MHz (PL-5A).

WWW Address: <http://www.3phase.com/madras/>

Mailing: P. O. Box 2468, Wheaton, MD 20902

Information: Leo Boberschmidt W3LEO
(301)946-3738, Jean Blacik N3PLC (301)
984-6114.

Club Call Sign: W3MAD

E-Mail: leob@erols.com

MADRAS wants to thank all of its members who participated in JOTA (Jamboree On The Air) with Boy Scout Troop 439. This is the second year we have had this Special Event with the Scouts. Once again we were able to get the callsign K3S.

We started setting up the equipment early Saturday morning on October 16th. The Scouts

arrived about 9:00 A.M. and the event got underway.

Breakdown of the antennas and equipment occurred around 5:30 P.M., with the help of the Scouts. A good time was had by all.

Our net is now being held, once again, on the first and third Thursday of the month. During the summer we only scheduled one net per month due to vacations, etc. Look for us at 9:00 P.M. on 145.45, our 2-meter repeater.

Our dinner meeting on October 28th was once again well attended. everyone seems to enjoy the gathering every month, plus the food is excellent. It also gives everyone an-opportunity to share the news within the ham community with one another.

Plans are underway for our annual Christmas Dinner. Watch for your December Bulletin for date, time and place. Hope to see as many of you as possible at this festive event.

Wishing all of you-a very happy holiday season.

73, Jean-N3PLC



Metropolitan Communications Network Radio Club, Inc.

Meetings: Quarterly, Second Sunday of the
month at 13:30 p.m. Place TBA

Repeater: 52.250 IN/53.350 Out.

Net: AM Coffee net Sunday 9:00 AM on
50.400

Information: 6608 N. 18th St. Arlington, VA
22205

Metropolitan Communications Network Radio Club had it's quarterly meeting in September at the QTH of Joe K3UAL.

The club is conducting a new Net on 6 meters. The Net meets on the 1st and last Mondays of each month. The Net is called at 8:00 p.m. local time, on 50.400 MHz AM. The Net is directed by a Net Control Operator. There is a Traffic Portion and a QSO Portion. Check-ins will give Call, Name, QTH or Mobile, Traffic or no Traffic. All Radio Amateurs are welcomed to check-in, Mobile or Fixed Station. Check-in with us and enjoy the Friendship and Fun of 6 meters.

Our weekly Sunday Morning Coffee Net is operating with new check-ins each Sunday. We welcome a new member Joe K3CHP of Riverdale, Md. Joe has been a regular and also participates in the Monday nite Nets. Bron N3AGB our Treasurer of St. Leonard, Md. was heard on a few weeks ago working K3UAL.

One of our old members Sherwood (Woody) Clark K3DLH has changed his QTH to Cambridge, Maryland. Woody was a regular on the Sunday Morning Net.



The Mid-Atlantic DX and Repeater Association

Meetings: Rotating locations among Hagerstown MD, Frederick MD, Martinsburg WV and Gaithersburg MD.

Net: Thursday evenings at 1930 local on 147.06.

4 State10M net: Wednesdays at 2000 local on 28.315.

Repeaters: Frederick MD: 147.06, 224.20, 448.125; Martinsburg WV: 147.345.

Mailing: 230 North Potomac St., Suite 2A, Hagerstown MD 21740

Information: Voice BBS (301) 416-8447 and (301) 473-4151.

Web Page: <http://www.qsl.net/madra>

E-Mail: madra@qsl.net

the September column. For December, one can only say that the whimper goes on, somewhat modified by a strong echo on the 147.06 repeater. The 448.125 repeater is in the less-than-a-whimper state, consisting as of this writing of a lot of components on various members' work tables. Better news is that 224.20 is working at about the normal level. Best news is that a good number of our members and supporters came through with money, materials, time and labor to help reduce the casualties.

On the public service front, MADRA was present, as always, at Brunswick's Railroad Days Festival. It was a tough time as we had nowhere near the usual level of response among our stalwart volunteer team, but we did the job.

Over the years the City government has actually learned from us how to best use radios to manage the festival. That has reduced their need for us to a single task: linking City administrative personnel with the police department, "just in case". Toward the end, we shut down the HF and VHF demo station and just put our operators in the field. Another job well done, thanks to that old volunteer spirit.

Another public service point was scored by Sid, K3SX, when a last-minute call went out for Ham communications to support the annual "Walk for Diabetes" in Frederick on 12 September. Sid showed up, ready to help, and when the rest of us Hams failed to make an appearance, he went ahead and walked the course, racking up \$740 in donations with his efforts.

One of the good things about this year's Simulated Emergency Test (SET) was that, for a change, it did not occur on the same days as the Railroad Days Festival. The scenario was very ambitious and should have been a good workout for emergency communications in Frederick County, Maryland, and the other areas from which MADRA draws its members. Sad to say, there's no info on what went on. We did canvass the group by e-mail, but no amplifying reports came in before it was time to send this to The Kindly Editor.

"...not with a bang, but a whimper..." is the famous line from a poem that was used to open

If you've checked the WebSite lately, you know that we are on the calendar to have the December dinner at the DanDee Restaurant, on US40 west of Frederick. The second Thursday is 9 December and the time, as usual is 7PM, or 1900 local if you prefer a 24-hour clock. Please be sure that you let one of the Directors know or send e-mail to the club address, just so we can warn the restaurant of about how many hungry Hams and friends will show up. As they say in the Nation's Capital, here's a "news leak": It looks like we may have a site arranged for those 6M, 10M and backup repeater components. We're getting good support from John Droneburg, Director of Frederick County's Public Safety Division and if we're lucky, we may have a big announcement for you in the next column.

Best wishes for Happy Holidays and for success to all in 2000.

73 DE N2CSQ/3



Mount Vernon Amateur Radio Club

Meetings: Meetings are held on the Second Thursday of the Month. The **December** Meeting/Party will be held at the Old Country Buffet 7820 Richmond Highway (US Route 1), Alexandria, VA 22306 - Telephone (703) 619-9557. Otherwise the meeting are at the Fairfax County Government Center, 2511 Parkers Lane, Alexandria, Virginia (Next to Mt. Vernon Hospital) at 7:30 p.m. local time.

Web Page: www.mvarc.org

Repeater: 146.655

Net: Tuesday Night ARES 8:30 p.m. (2030 hours) local time.

VEC Exams: Second Saturday of the Month. Contact John Forrest WZ4A at (703) 971-9304. This is a no fee exam.

Information: Steve Schneider, K3IZ, at (703) 780-7248 or e-mail: SteveS@juno.com

DECEMBER MEETING: Reminder: The December meeting/party will be held at the Old Country Buffet. Please consider participating in the gift exchange (\$10.00 maximum suggested).

October Happenings: Club President Mary Morris passed out coffee mugs to the Farfest volunteers. **ARES/RACES:** SEC Frank Mackey, K4EC, showed the club the "new" Virginia RACES ID card, and thanked all those hams that helped during and after hurricane Floyd. Jeanne Rexroad, N4ZGI, noted the forthcoming Marine Corp Marathon, and the Ronald Reagan National Airport SET events held late October, 1999. Ed Harris, KE4SKY, distributed batteries. Other news: Frank Butler, W4HA, stated that this would be his last meeting because he had accepted a job position in Florida. Temporary QRT'd are club Vice-President Frank Lempicki, AA4ZS, (foot infection), and Chuck Hasser, W3HSW (low blood pressure). Please recover soon. Ed from HRO Woodbridge Store visited us and said hello. An excellent presentation on the ARRL QSL Bureau was given by guest speaker Dick Maylott, W2YE. Anna Keller, KG4DEX, was this month's "cookie monster".

73's, Bob Lepelletier, KI4TO



National Capital ARES Council

NCAC Net: Sunday at 9 PM on 146.91(-)

Voice mail: (703) 359-3414.

E-mail: NCAC@usa.net.

Marine Corps Marathon

Every year, while preparing for the Marine Corps Marathon, I am struck by the generosity of volunteers who offer not only their valuable time, but equipment to loan and share. This year, without benefit of the time change, we had to be out there without that treasured extra hour of sleep; it requires a creative effort on our part to match the

actual assignments with provided map; sometimes we get lost and there were not be enough lunches or shirts for everyone at check-in. With nearly 100 volunteers, no matter how well you plan, there will be problems, confusion and last minute changes. The professional attitude of our volunteers when called on to be flexible under difficult circumstances makes me proud to be associated with such a fine group of people. I want to thank everyone, both personally and on behalf of Navy Medical and Marine Corps Staff for their dedication and determination to do the job and do it well. They are not blowing smoke when they say they "couldn't do it without you!"

National Airport Exercise: We were spared on this one—we didn't have to report at 6 AM with the volunteers who were playing victims. Communications were provided between the Alexandria Red Cross Chapter and key personnel and locations at the airport and the exercise went smoothly. Thanks to everyone who volunteered and a special thank you to Carol Chaney KG4EXZ—a brand new ham who held down net control for most of the day. It was a good experience for her, she did very well on her second Public Service activity (her first was the Marine Corps Marathon).
Public Service Calendar:

December 4: ARES Institute at Red Cross National Headquarters, 8111 Gatehouse Rd (near Rt 50 & Capital Beltway in Virginia—an easy drive from Maryland), 8:30 - 5:00. Topics will include the Regional Operation Plan for ARES/RACES on New Year's Eve, Winter Storm Reporting for Skywarn, Alternative Power Sources, Simplex Operations, Directed Net Procedures, National Traffic System and others. Materials and lunch are included for the incredibly reasonable price of \$10. Pre-registration is required. This meets the training requirement for the Va RACES card.

New Year's Eve/New Year's Day: First Night Alexandria and activation by jurisdictions in readiness as they assess effects of computer problems related to that problem we hopefully won't be hearing about anymore. Please prepare yourself just-in-case and check in to local repeaters

for information on those days.

Simplex net: Va District 2 sponsors a simplex net each Friday night at 8:30 on 146.415. All amateurs are welcome and encouraged to check in. If you missed the simplex operation at the Marine Corps Marathon, here's your chance! It takes more patience and skill than your everyday "rag chew".



Ole Virginia Hams Amateur Radio Club, Inc.

Mailing Address: PO Box 1255 Manassas, VA 20108.

Club Call Sign: W4OVH

OVH Repeaters: 146.97-, 224.660-, 442.200+

OVH Packet Nodes: 145.030 (Port 1), 223.540 (Port 3)

BBS: BBSNVA/N4WJN (SYSOP: Bill)

Internet: <http://www.qsl.net/olevahams>

Meeting: Third Monday of every month. Northern Virginia Electric Cooperative Technical Center Gainesville VA.

Weekly nets: Thursday 8pm club net, Sunday 8pm YL talk net.

Information: Mary Lu KB4EFP (703)369-2877.

OVH was once again an active participant in the annual Jamboree on the Air (JOTA). JOTA is an annual event in which about 500,000 Scouts and Guides (both boys and girls) all over the world make contact with each other by means of amateur radio. The festivities which were cohosted by the Urbanna Swim Club and took place at the Urbanna Swim Club facility in Manassas on October 16th from 8am until noon. OVH members set up 4 operating positions which were connected to either a vertical antenna, a 40 meter dipole or an 80 meter dipole. Scouts from Pack #1195 National Capital Area came to partake in the festivities as well as to learn more about this fascinating hobby from OVH members. Our Scouts talked with other scouts from all over the US and the world. Contacts were made

to states like: VA, TX, OH, MI, FL, NJ, MN, and NC and DX locations like England, Spain, Italy, South Africa and countries in Central America. 25 scouts from Pack 1195 attended this event and approximately 25 contacts were made while tons of cookies and sodas disappeared. Each scout in attendance was presented with a special edition of the American Radio Relay League's comic book, "Archie's Ham Radio Adventure".. A great time was had by both the scouts and the OVH members in attendance. Many thanks to John, N4YOB and Jack, N4YIC for organizing and setting up this great event and to the OVH members who gave up their Saturday morning to help teach the next generation about the magic of amateur radio. Clearly, the Scouts enjoyed the excitement that amateur radio has to offer.

At a recent meeting OVH had a very interesting program about antennas given by Mike Toia, K3MT who is a member of the Vienna Wireless Club. He presented a slide show various types of antennas with an emphasis on VHF antennas. Mike worked for a number of years with the Voice of America and discussed a number of HF as well as VHF antennas which can be made inexpensively and put up and made relatively inconspicuous. He had an interesting slide presentation about not only amateur radio antennas but antennas he worked with and tested while with VOA. He has a very nice website where some of his antenna ideas can be viewed: www.erols.com/k3mt (and he has promised new antenna updates on it as well). If anyone is interested about learning more about this fascinating part of the amateur radio hobby, Mike would be someone who can teach you a lot. This program was very interesting and informative and was well received by OVH members in attendance.

In December, OVH will be providing communications for the annual Manassas Christmas Parade as well as providing communication backup for local agencies in the event of any Y2K problems. More on these activities next time.

That's it for now. Hope everyone has a pleasant and safe holiday season and a happy and

prosperous New Year.

73 and CU next year, Ruth KU4WH



Potomac Valley Radio Club

Packet: W3LPL 145.59 441.25, KE3Q 145.57, WR3L 145.61 440.95, N3RR 145.51 441.325, K3SKE 144.93, N4OHE 145.71 440.925, K3MQH 145.63, N4SR 145.63, K4FJ 145.77, W4XP 144.99

Web: www.pvrc.org & www.pagesz.net/~pvrcnc

Repeater: 147.000(-) Thanks to Ashton RCS
Information: Bob Dannals, W2GG@arrl.net, 410-472-2004 before 9pm and Rich Boyd, KE3Q@erols.com, 301-464-8014

This column will provide the casual operator with sufficient information to operate in selected December contests. You do not have to be a member of any club or send in a score to enjoy operating in contests and helping others to earn points. Local times are given below but any logs should be in UTC (Zulu) time. Either the above contacts or the editor will be glad to provide information about contesting or becoming a member of PVRC, a nondues club.

The below 160m and 10m contests are club competition contests. That is, PVRC members will enter the contest as individuals and also add their scores for a club score competing against other contest clubs. If you hear local stations in either contest, please give us a call and an exchange.

ARRL 160 Meter Contest - CW. Dec 3th 5pm to Dec 5th 11am. Exchange RST and ARRL/RAC section except DX stations send only RST. Most will send 599 regardless of your actual signal.

ARRL 10 Meter Contest - CW & SSB. Dec 10th 5pm to Dec 12th 5pm. Operate no more than 36 of the 48 hours. Sent RS(T) and state while

DX stations send RS(T) and QSO serial number. Novices and Technician sign /N or /T.

RAC Canada Winter Contest - CW & SSB. Dec 18th 7pm to Dec 19th 7pm. CW suggested up 25 kHz from band edge on the half hour. SSB suggested on 1850, 3775, 7075(VE), 7225(US), 14175, 21250, & 28500 kHz. Plus 6 and 2 meters. We send RS(T) plus QSO serial number. Canadians send RS(T) plus province or territory.

73, Dick Wilder, K3DI, 913 Shore Acres Rd,
Arnold, MD 21012-1724 wilder@clark.net
410-757-6706



Quarter Century Wireless Assn. Chapter #91

Meetings: Neighbor's Restaurant, Cedar Lane and Park Street, Vienna, VA; third Saturdays; Noon. Business/Program Meetings: Odd-numbered months. (Come at 11:30 to chat; program begins at noon.) Informal/Ragchew Meetings: Even-numbered months.

Newsletter: Bi-monthly to all members.

Information: Jim Wilcox (W3WV), Publicity Chair; 3442 Surrey Lane, Falls Church VA 22042; 703-560-0757. Also on the VHF net.

VHF FM Net: Sunday 9 AM, 146.79MHz.

October Field Trip

The Vic Clark Chapter 91 of QCWA had a most delightful and educational time visiting the PBS Satellite Systems Teleport "hub" in Alexandria. This is the largest and most complex such system anywhere. The major TV networks don't even come close.

Bill Hull, N4LRA, the facility's Director of Operations and Maintenance, was our guide. Considering that Bill is the man who designed the facility, and who currently manages it, we were in good hands. Bill is to be congratulated for the excellent facility he has created.

It really is hard to describe the building, the antennas, and the equipment: there is so much of a high-technology nature to see, that any description given here would not do justice to the system. I think it best simply to say that this may well be the most enjoyable field trip we've had. Bill truly was an excellent host; he obviously enjoys his work and takes great pride in his facility. If you ever get a chance to visit it, do not miss it! We certainly had an excellent time!

Bill joined us for lunch at the nearby Four Seasons Restaurant in the west end of Alexandria; the food was a close second to the tour!

There will be a detailed write-up of the trip in our chapter's newsletter (where we have more space available). If you're not a member of Chapter 91 and would like to receive the newsletter, you either can join Chapter 91, or, if you were not licensed at least 25 years ago, you can receive the newsletter if you are a "friend" (financial supporter) of Chapter 91. Contact Dick, KM4ML, (see the masthead) for more information.

Upcoming Events

20 November: regular business meeting at Neighbor's restaurant, election of officers. 18 December: holiday luncheon at P.J. Skidoo's in Fairfax.

ar 73 es gl de Jim W3WV



Licensed at least 25 years ago?

And licensed now?

Then you should belong to the
Quarter Century Wireless Association

For information write:

159 E. 16th Ave., Dept F
Eugene, OR 97401-4017
<http://www.qcwa.org>



Shenandoah Valley Amateur Radio Club

Meetings: First and Third Friday of every month at 7:30 p.m. SVARC Club House 2921 Grace Street, Winchester, Virginia.

Repeater: 146.22 In/ 146.82 Out.

Net: Shenandoah Valley Emergency Net (SVEN) 7:15 daily on 146.22/146.82 Repeater.

Mailing: P.O. Box 139 Winchester, 22604.

President: Wayne Koehler, KE4PMS

Info: Wayne Koehler, 540-667-8629.

Internet home page: <http://www.vvalley.com/svarc>.

After a very busy and eventful October in support of public service events.....we can look forward to a break until Spring.

Thanks to all of those who helped with the Walktoberfest (Diabetes Walk), the MS 150 Bike Tour, which took us from Winchester to Harrisonburg and back, the Boy Scout Jamboree, held for the first time at the Middletown Park this year, the Cedar Creek Battlefield Re-enactment at Belle Grove and the 3rd and final horse event of the year.....the Fort Valley 150.

In addition to the clubs 49th Hamfest held at Berryville and a ARES/RACES SET exercise that we executed in June, the club participated in the June Field Day(s) at Jim Barnett Park, the Clarke County Ruritan Fair and supported 15 Public Service Events for our community and/or surrounding communities.

We still have the KidVention at Lord Fairfax Community College on Sat, Nov 06, and they are expecting 1000 children, so this will be a day to remember. We anticipate the use of three portable amateur radio stations to support this event.

We also had six (6) official workdays called by President Wayne Koehler for maintenance

purposes to work on the VHF/UHF antennas, the 70CM Repeater Site and installation of the new HF tower at the clubhouse.

We have at least one more work day before winter to install the rest of the HF antenna parts and the feedline.

Thanks to Karen Avey/KF4LGW and Jane Mort/KF4VEC we have enjoyed two (2) Socials and "PLEASE" do not forget the Christmas Party they are planning for Fri, Dec 17th, at the Boy Scouts of America Building (Youth Development Center) on Shawnee Drive.

This will count as the clubs second meeting for December. Lets hope VDOT has the road finished and open for our safe travel to the party.

New officers were elected in October to serve for the year 2000.

President: Rick Choy/N3HXT

Vice Pres: Brian Mawhinney/WB3FUM

Secretary: Jane Barb/KD4IET

Treasurer: Mike Collins/W4ACC

Trustee (three year term): Guy Avey/ W3INT

Serving current terms as Trustees:

John Kanode/N4MM

Don Mort/KU4KN

73 until next time, Guy W3INT
guy@visuallink.com

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Southern Maryland Amateur Radio Club

Meetings: 2nd Friday of each month at 1930 ET at the PG County Police, Clinton Station, 6707 Groveton Drive, Clinton, Maryland.

Nets: Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (+/-QRM); Thursday at 2000 on 28.447 USB.

Repeater: WA3YUV/R 147.15+, Brandywine, Md. PL 114.8, Autopatch to 911.

Mailing Address: P.O. Box 273, Cheltenham, Md, 20623

Information: Vic (WA3YUV) & Linda (KA3VNI), (301) 888-1388.

Internet: <http://www.iscanit.com/smarc>

Hello SMARC members and friends. Good News! As a matter of fact, there are several bits of good news this month. First of all, our repeater gurus Vic WA3YUV and Mike K3RFI worked on the 440 machine on October 31 .. that's right, Halloween! I am pleased to report that, in spite of the scary date, they wove their magic spell and it is working much better. Vic says that he is now positive, beyond a shadow of a doubt, that a Receive Crystal will not work properly in the Transmit Crystal socket .. yep, apparently Mr Murphy pulled that trick on them when they were not looking. The power output now is about double what it was before they tweaked everything up. So, give it a try. It listens on 448.600 and transmits on 443.600, no PL needed at the present time. Thanks, Vic and Mike!

By the time you read this, it is very likely that these same two SMARC members will have made it to the 2-m repeater site and installed the new controller, and tweaked up the 2-m machine as well.

We plan to remove the autopatch access code requirement in the very near future, thus making

the SMARC autopatch open to anyone using the repeater. Of course, you will still need the PL tone of 114.8. Just listen to the repeater announcements to find out how to bring up the autopatch. It will probably be "STAR(*) UP, POUND(#) DOWN."

More good news! Linda, KA3VNI, is coordinating final plans for the SMARC Christmas Party. This year, it will start at 7:00pm on Friday, December 10 (our regular meeting night) at the OLDE COUNTRY BUFFET in Waldorf. Just come through the line, pay the usual charge, and join us in our SMARC Party Room. Will have a quick meeting, installation of new officers, and all the food you care to eat. Will also have the "Indian Gift Givers' Exchange" .. check SMARC SPARKS newsletter for additional details.

I regret that I must also pass along some sad news this month. I am quoting from a recent message from Linda, KA3VNI:

=====

OUR THOUGHTS OF SYMPATHY FOR SUE AND VANCE CARPENTER AND FAMILY.

We pass along our heartfelt sympathy to Sue, N3LVY, on the passing of her Mother on October 9, 1999. On October 15, 1999, John "Jack" F. Heveron, Sr., KJ2P, became a silent key. He was Vance's Uncle and was most instrumental in influencing Vance to also become an Amateur Radio Operator (and Vance in turn encouraged Sue to become a Ham). Mr. Heveron was 80 years old and a member of the Rochester, NY, Amateur Radio Association for 26 years and was also a World War II Veteran. Sue and Vance, our thoughts are with you during this sad time.

=====

During the ARRL Simulated Emergency Test (SET) on Saturday, October 30, the SMARC repeater came in handy for the passing of at least 8 or 10 messages between Maryland Army MARS and the ARES/RACES/NTS group. Thanks to the members who stood by patiently during this period.

If you notice an improvement in the quality of SMARC members 2-m signals, it just may be due to the fact they went to our November meeting and built themselves a 2-m J-pole antenna. At least, that is what we plan to do. Will let you know next month how things go.

All are welcome to attend our monthly meetings and our weekly nets (Tuesday 8:00pm on the repeater, Thursday 8:00pm on or near 28.447) .. and remember, the repeater is there for your use 24 hours a day, whether you are a SMARC member or not.

Until next month ... 73, Al W2GJS



Sterling Park Amateur Radio Club

Meetings: 8:00 P.M. - Third Monday of the month except July and August at Sterling Community Center Annex, Church Rd. (Rt. 625) near Route 28, Sterling, VA.

Mailing: Call Box 599, Sterling, VA 20167.

Information: Bill Lorentz, KS4II, 703-444-6341 or via email KS4II@AOL.com.

Home Page: www.qsl.net/sterling

Club Callsign: K4NVA

October saw another good turn out for the monthly SPARC meeting. Quite a few hams brought their vintage equipment for all to admire and enjoy. Thanks to everyone who brought their gear to the meeting. More information about the equipment should be posted on the club website in the next few weeks.

Speaking of the website, it has been updated and has a totally new look. Try to copy the Morse code that gets sent when you log into the site....I think you will get a charge out of it. Thanks to Mike for all his hard work on the site. Congratulations to Mike Sheleheda on his new call K4MTS.

I hope everyone has a wonderful and joyous holiday season along with a Y2K compliant new year.

73, Bill, KS4II



The Middle Atlantic FM and Repeater Council, Inc.

Meetings: Coordinating Committee (CC) meets the last Monday of each month, 19:30, in the conference room of the Prince George's County Emergency Operations Center off Central Avenue.

Address: P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

Internet: www.T-MARC.org.

E-mail: TMARC@T-MARC.org

Officers: President - Larry DiAnna WA3KOK (410) 792-3494, ldanna@teamvideo.com. CC Chairman - Bill Conaway W8HNT (703) 425-3702, conaways@erols.com. Ombudsman - Jim Erickson K3LFO (410) 549-1041 k3lfo@erols.com. Public Info. Officer - Dave Prestel W8AJR (410) 203-9432 dprestel@sprintmail.com.

T-MARC's annual meeting will be held on Sunday, December 12, 1999, at 1:00 PM. This year's meeting is being hosted by the Anne Arundel Radio Club. Directions to the meeting site are enclosed. We encourage you to attend to enable your voice to be heard regarding T-MARC's coordination of requests for repeaters in our area.

Here is the agenda for the meeting. If you have issues you wish to be added to the agenda please e-mail them to ldanna@teamvideo.com.

AGENDA

Pre meeting: Collection of annual dues.
(Required to be eligible to vote)

- 1) Reading of minutes of last year's meeting
- 2) Treasurer's report
- 3) Committee reports
- 4) Old Business
- 5) New business
- 6) Discussion of T-MARC 6 meter band plan (Should we align with our neighbors?)
- 7) Discussion of NFCC (Update on activity and current T-MARC position. Should T-MARC support the majority initiative or stay our course?)
- 8) Election of officers
- 9) Adjournment

If you, or someone you know, is interested in serving as an officer of T-MARC please let Larry D'Anna, WA3KOK, know. We look forward in seeing you on Dec. 12

Here are the directions to the Anne Arundel Radio Clubhouse in Davidsonville, Maryland: Take Route 50 to Davidsonville Road (Rt. 424) South to Central Avenue (Rt. 214) West. Drive west on Central Avenue for about 1.5 miles to Queen Anne Bridge Road, which veers off to the left opposite the Davidsonville Elementary School. Follow Queen Anne Bridge Road until you come to a fenced complex on your left. Turn into the complex at the driveway (about 100 yards further down the road). Follow the road up the hill to the clubhouse. There is a tower next to the clubhouse which serves as a good landmark.

Talk-in stations will be on the 147.105/R+ and 444.40/R+ repeaters.

Chapter X

Society of Wireless Pioneers

THE INTERNATIONAL ORGANIZATION
OF PROFESSIONAL RADIO TELEGRAPHERS

For Information Call
(703) 536-9537



Vienna Wireless Society

Meetings: 7:30 pm the second and fourth Fridays of the month at the Vienna Elementary School, 128 Center Street South, in Vienna.

Nets: Pow-Wow nightly at 9 pm on 28.444 MHz. Slow speed code, nightly 8:30 pm on 28.390 MHz. Vienna Emergency Net, Wednesday 7:30 pm 146.685(-).

Repeaters: K4HTA 146.685(-), 448.375(-).

Information: Steven Karty, N5SK, president, (703) 938-5454; Training: Kurt Wehle, WA4SMI, (703) 534-3905; Programs: Mike Steussy, AE4R, (703) 281-0010. Newsletter Editor and Media Representative: Jim Parsons, WA4LTO, (703) 392-0150.

Mailing: P.O. Box 418, Vienna, VA 22183

At our regular meeting on 8 October 1999, VWS Member Ed Kesler, a retired Navy electronics engineer, talked about the demise of ham radio equipment manufacturers Hallicrafters and National. Ed related his experiences from the late-1960s when the Navy was trying to modify their radios for SSB operation, and later attempted to procure new SSB radio equipment. He described the difficult path of government contracts, especially in that era of high economic inflation. He said that Hallicrafters bought out another company which was in financial distress from a contract to produce field modification kits, but Hallicrafters underestimated the problems they were inheriting and ended up in bankruptcy when they couldn't deliver on the contract. Ed continued his talk with a description of National Radio Company, which contracted to build new radio equipment for naval air stations. After a workable design had been made and approved, the company fired the entire development staff and replaced them with a new crew who entirely redesigned the equipment, introducing serious delays and adding costs. National also won the production contract but miscalculated costs and, when they couldn't get any more funding from the Navy, they defaulted

on the contract just like Hallicrafters and went broke. Both companies might have been hoping to "get well" on the engineering change orders, but there weren't any. Thank you, Ed, for providing us with these bits of history.

VWS Member Louis Luh, KQ4EY, celebrated his 93rd birthday on 6 October. Congratulations, Lou.

At our regular meeting on 22 October 1999, Ted Cohen, N4XX, continued his presentations on shortwave propagation, this time with special emphasis on the 160-meter band (known as "Topband"). Dr. Cohen is a recognized propagation expert who spoke to us in September about HF propagation and short-term (27-day) propagation forecasting. He emphasized that the characteristics of 160-meter propagation are much different from those observed in the HF bands (160 meters, of course, is in the medium frequency (MF) band). He said that when he first began working on Topband, he tried to correlate observed propagation characteristics with solar and geomagnetic indices but found no correlation. He searched further, using other indices, including ultraviolet and particle radiation, but again, found no correlation. He concluded that you simply have to spend time on the band, mostly listening, because it's really difficult to say when an opening will occur. And to make matters worse, some of these openings may only be 5 minutes in duration.

This being said, there still are a number of things an operator can do to increase his chances of working DX on this band. It's well known, of course, that the band is only open during the hours of darkness, when recombination in the D-Layer removes much of the absorption that suppresses signals during the day. Thus, stations on both ends of a path must be in the nighttime sector. If your operating time is severely limited, the very best times to be on the band, he noted, are during the hour before sunrise (his first choice), closely followed by the hour after sunset. He favored the morning hour because during sunrise on the east end of a path, signals from the west should peak

just before sunrise because "solar-excited turbulence" should cause signals from the west to be "dumped" to earth, sometimes at very high elevation angles. For this and other reasons, Dr. Cohen recommended that operators use a variety of receiving antennas, including verticals, dipoles (if you can get them up to 45 or 50 feet, or more), Beverages (of course!), loops, EWEs, and others.

Dr. Cohen noted that if ducting in the E-valley between the residual E and the F layers was responsible for the propagation you are experiencing, it was easier to inject a signal into the duct from the west (30% chance for elevation angles between 7 and 25 degrees) than from the east (10% chance for the same range of elevation angles). Thus, when ducting is operative, stations on the eastern end of a path will be able to hear signals from the west better than stations to the west will be able to hear stations on the eastern end of the path. He also noted that even if you hear a strong signal, you still may not be able to work it if the propagation favors an area other than yours.

Interference from broadcast stations can be especially bad in this band. Dr. Cohen said to avoid frequencies ending in "0" because of harmonics from broadcast band stations. Also, at the start of a new 160-m season (which runs from 1 September through 31 March), super-stations tend to hog the DX because they are vying to see who can work WAC first as well as flexing their muscles prior to the start of the DX contest season.

For city dwellers, Dr. Cohen recommended a quarter-wave, inverted-L transmitting antenna, with the bend at the highest point possible. He uses a coaxial inverted-L, which doesn't need either a loading coil or a loading capacitor. He simply continued to install ground radials until the SWR dropped to around 1:1. Dr. Cohen also recommended the use of a noise canceller such as an MFJ Model 1025 or 1026. This device not only should help to eliminate line-noise, but also can be used to null the QRN from distant storms. At his station, Dr. Cohen uses the model 1026, with a

160-m dipole as the auxiliary antenna.

Although conditions on Topband do not, in general, correlate with the solar and geomagnetic indices broadcast by WWV and posted on various Amateur Websites, one can, nevertheless, make some rough estimates of the state of propagation over high-latitude (polar) paths by observing the geomagnetic indices for Canadian observatories. These can be found, among other places, on the Solar Terrestrial Dispatch Website. A Canadian station's k index of 0 or 1 usually indicates that the geomagnetic field is sufficiently quiet as to allow signal propagation over high-latitude paths. Maps showing the auroral zone (found on STD) also will give you some idea of how your signal will fair on paths through the arctic region.

Finally, Dr. Cohen noted that there are nights when the 160-m CW band sounds like the 20-m band. He noted that you could sit there and work stations in the Middle East and Europe as the day-night boundary (the terminator moves) west across those region. In one night several years ago, Dr. Cohen mentioned working stations in Greece, Cyprus, Italy, Spain, Germany, France, Sweden, England, Ireland, Scotland, and other countries, each station's signal peaking just before its local sunrise. It is thought that at times such as these, residual D-layer ionization is lower than normal for the nighttime hours.

We again thank Dr. Cohen for a very interesting review of that fickle thing called "radio-wave propagation." As we mentioned last month, his book, *The New Shortwave Propagation Handbook*, is available for \$19.95 (plus \$4 shipping and handling) from the CQ Bookstore, 1-800-853-9797. Note that members who bundle their orders so that the total order is \$50 or more will not pay any S&H charges.

CURRENT & FUTURE EVENTS

Please note that the VWS has only one regular meeting in November and one in December; there will be no meetings on 26 November and 24 December.

1 NOV - VWS Board of Directors Meeting

12 NOV - Regular Meeting: Elections for the VWS Board of Directors. If time permits, VWS member Kerry Kingham, WA4BQM, will describe how the Global Positioning System (GPS) works.

6 DEC - VWS Board of Directors Meeting

10 DEC - Regular Meeting: Holiday party. We'll also have our annual members' and guests' show and tell.

73, Steven - N5SK



**Woodbridge
Wireless,
Inc.**

Meetings: Second Tuesday of each month at Springwoods and Chaucer, Lake Ridge, VA.

Net: Monday nights at 2000 on 147.24 with 224.78 link.

Packet: N4SR 145.63 (DX packet cluster)

Luncheon: Every Friday at noon. Check-in on 147.24 for location.

Repeaters: WB4FQR 147.24 (+), WB4FQR 224.78 (-), WB4FQR 444.90 (+), N4LJZ 147.585 simplex PL-100 HZ

Mailing: PO Box 112, Woodbridge, VA 22194

Information: Bob Graham, K4RG, 703/878-0697

Web Page: <http://www.pwcweb.com/wwi/>

CONGRATS TO THE NEW WWI OFFICERS

The 1999-2000 WWI officers were elected at the 12 October meeting.

PRESIDENT - WD4KOF, Jack Carwile 491-3230

VICE PRESIDENT - W4DC, Denis Catalano

680-4998

SECRETARY - K4JK, John Kendra 590-3373

TREASURER - W4AD, Dave Henry 670-4330

ACTIVITIES - KR4KF, Bob Tyson 590-2482

TRUSTEE - W4IY, Jim Hale
BOARD MEMBERS

WA0DYJ, Stu Mitchell 670-4252

K5OF, Ed Pitts 494-9598

K4RG, Bob Graham 878-0697

JAMBOREE ON THE AIR - JOTA

On 16 October, four stations were humming and JOTA was under way. Woodbridge Wireless has been sponsoring JOTA for the local scouts since 1992. W4DC, KA4RRU, and W4CE have been present at all eight. Although the scout turnout was less than past JOTA's, seven scouts did earn their Radio Merit Badge in one day. Two other scouts partially completed the requirements. The club participation was great. Thanks go to W4DC, K8MLM, KQ4KK, KC4YXB, KG4DFJ, W4CE, W4DAV, KA4RRU, NL7TK, KF4CJR (Kent's daughter, Kathy), and N4CWX, and also to, WB4EIY, KC4BJE, KG4DMM and KR4KF for stopping by. Just a few years ago Adam, KG4DFJ, was a scout participating in JOTA, now Adam has his license, is an active member of WWI, and is helping with JOTA and the Radio Merit badge.

**BIG THANKS TO CONTRIBUTORS TO THE
REPEATER MOVE**

We are winding up our fund drive for the repeater move and have started procuring the materials needed to actually make the move. Over 60 contributions have been received. Thanks to all who have contributed. Although we have made our original goal of raising \$4,500, we still need about \$1,700 to complete the project. Expenses have climbed because of changes from the original plan by the PWC Service Authority and CELL ONE. For example, we cannot place equipment inside the tower, therefore we must buy a building for placement outside the water tower. Also, we must have 10 foot separation from the CELL ONE antennas, so we must buy special masts, clamps, and mounting hardware. So, if you have not yet contributed, please consider helping out. Just write out your check to WWI and send it to P.O. BOX 112, Woodbridge 22194. This is the first time in

25 years the repeater has been located/relocated, so look at this as an investment for the next 25 plus years. Your contribution is tax deductible.

**WWI ANNUAL CHRISTMAS/HOLIDAY
PARTY - DECEMBER 10th**

It's all set. This annual event will take place at Kilroy's in Woodbridge, Monday, December 10th at 7:30pm, and will replace our monthly meeting. Cash bar starts at 7:30pm, Dinner at 8pm, followed by a short program. So mark your calendars now. The menu is the Steamship Round Buffet which includes roast beef and ham sliced to order with green beans, house salad, rolls, and dessert. The cost per person is \$20 and includes tax, tip, and many door prizes. Awards will also be presented. Tickets are being sold by Alex, KE4BUS and Denis, W4DC. If you interested in donating a door prize, contact Alex or Denis

**OPEN TO ALL
AMATEURS:
VOICE PLAYBACK TEST**

The 146.610 and 146.880 repeaters have voice playback capability. To access and test your equipment:

- +Key mike, identify and press *21.
- +Un-key and wait for one second.
- +Key mike and test for up to 10 seconds.
- +Un-key for instant playback.
- +Key and identify when finished.

*(Courtesy of The Green Mountain
Repeater Association, (GMRA))*



SHACK
SALES

Non-commercial advertising of Amateur associated equipment is available to subscribers of *Auto-Call* at the rate of 5 cents per word with a **\$2.00 minimum**. Commercial vendors and non-subscriber rate is 17 cents per word with a \$5.50 (1 inch) minimum. Special headings or special spacing (e.g. one item per line) may be used but such ads will be charged at the column inch rate.

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Your full name and address must be provided with each ad but need not be published. No ads

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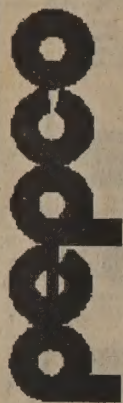
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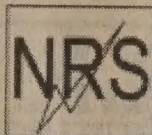
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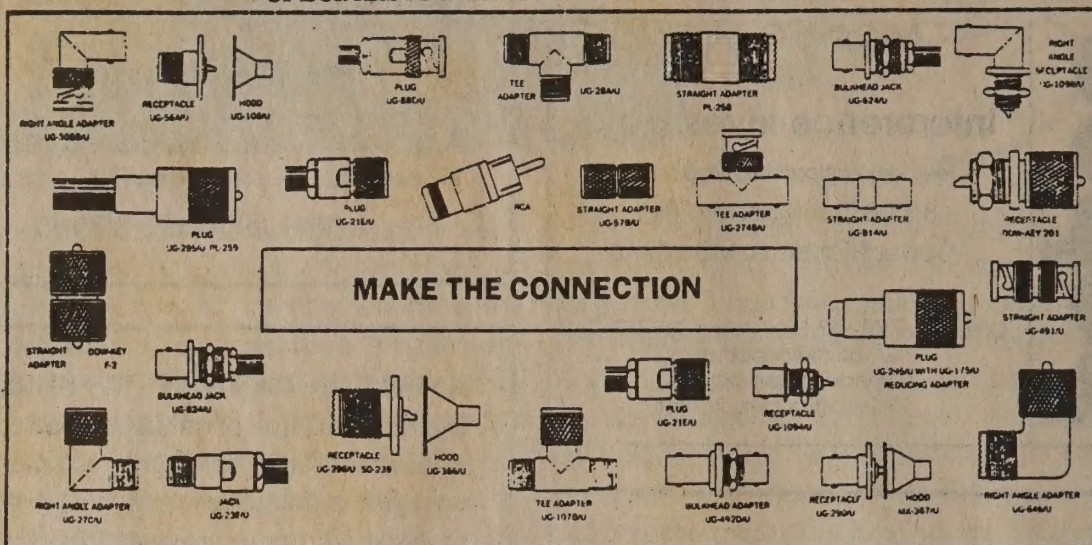
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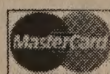
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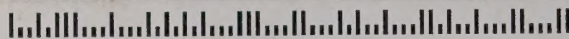
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Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 BARC Montgomery	2 Anne Arundel	3 Mobileers Charles Co. Shenandoah	4 Green Mtn.
5 Kent Island	6 DOSARC	7 Antietam	8 VOA FAR - MD Exp Post	9 AMRAD MADRAS Mid-Atlantic Mt. Vernon HEMARC	10 Vienna So. Maryland Alexandria	11
12	13 Carroll Co.	14 Leisure Frederick Woodbridge	15 BARC Montgomery Goddard QCWA 137	16 Anne Arundel	17 Shenandoah	18 Capital City QCWA 91
19	20 OVHA Sterling Park	21 Antietam Arlington	22 Exp Post Moose	23 MADRAS St. Mary	24 Vienna Central MD	25
26 Adventist	27 Green Mtn. T-MARC Calvert	28 Columbia	29 Carroll Co.	30	31	



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